

CORRECTED VERSION

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
10 May 2001 (10.05.2001)

PCT

(10) International Publication Number
WO 01/33392 A2

(51) International Patent Classification⁷: **G06F 17/00**

(21) International Application Number: **PCT/US00/29086**

(22) International Filing Date: 20 October 2000 (20.10.2000)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/163,647 4 November 1999 (04.11.1999) US

(71) Applicant (for all designated States except US): **ABLIZER SOLUTIONS, INC.** [US/US]; 744 Alabama Street, Level 2, San Francisco, CA 94110 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **SASTRY, Krishnan** [IN/US]; Apt. 8, 50 Parkridge Drive, San Francisco, CA 94131 (US). **MEHROTRA, Rishabh** [IN/US]; 1210 23rd Street, San Francisco, CA 94114 (US). **NATH, Sanjiva** [US/US]; 7 Sager Court, Orinda, CA 94563 (US). **GRAY, Andrew** [AU/US]; 2168 Fell Street, San Francisco, CA 94117 (US). **RUTSKY, Ken** [US/US]; 807 Menlo Oaks Drive, Menlo Park, CA 94025 (US). **ALLEN, Julian** [GB/US]; 348 Cascade Drive, Fairfax, CA 94930 (US).

(74) Agents: **GLENN, Michael** et al.; Glenn Patent Group, Suite L., 3475 Edison Way, Menlo Park, CA 94025 (US).

(81) Designated States (*national*): AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA.

(84) Designated States (*regional*): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).

Published:

— without international search report and to be republished upon receipt of that report

(48) Date of publication of this corrected version:

10 May 2002

(15) Information about Correction:

see PCT Gazette No. 19/2002 of 10 May 2002, Section II

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: **EMPLOYEE PORTAL AND METHOD OF USE THEREFOR**

(57) Abstract: An Employee Portal allows an employer to deliver an aggregation of services and information to employees over a company intranet, strengthening employee loyalty by providing additional benefits and assisting employees to maintain a healthy balance between work and personal life. Employees link to a customized extranet portal through a hyperlink from the company's intranet. The portal, a scalable, customizable software application leased to the company on a subscription basis from a service provider, provides an online shopping mall in which employees may purchase from a selection of discounted goods and services. The portal also provides a selection of communications tools and community tools to enhance communication between employer and employee, and cooperation and community among employees. A controlled access administration module allows an Administrator, typically a human resources representative, to manage the various services and tools and to publish information at the company and group level. The portal application allows a portal to be deployed very rapidly, using a configuration tool that creates a logically separate, virtual portal space, defines content for the portal, defines target groups within an employee population, and customizes content and services to the target groups according to rules specified by the employer.



WO 01/33392 A2

EMPLOYEE PORTAL AND METHOD OF USE THEREFOR

5

BACKGROUND OF THE INVENTION

FIELD OF THE INVENTION

10 The invention relates to corporate intranets and portals. More particularly, the invention relates to an Employee Portal for aggregating and delivering services and information to employees over an employer's intranet.

DESCRIPTION OF THE PRIOR ART

15

Analysis of recent workplace trends shows that employees are working longer hours than ever, particularly knowledge workers in the high-technology sector. As a result, employees find it more and more difficult to balance the often-conflicting demands of their work and their personal lives. Increasingly, Human Resources departments are stepping in to provide information and services to employees that help them improve their work/life balance. Also, companies are looking for cost-effective ways of enhancing their benefits offerings and strengthening employee commitment in a tight labor market. More and more employers have established relationships with vendors that allow them to offer their employees deep discounts on merchandise, financial services, travel and recreational opportunities. Administering these discount programs is often costly and time-consuming, and the task of administering them is often complicated by the need to provide different mixes of products and services to different segments of an employee population. Sometimes discount programs are out-sourced to organizations that provide aggregations of goods and services from various vendors. A natural result of the explosion in e-commerce is the provision of such discount programs over the Internet. Such online offerings offer very little customizability, such as branding. Since they cannot be customized, a company may be placed in the undesirable position of offering a competitor's products for sale at discounted prices to their employees through their discount programs; for example a computer manufacturer that subscribes to a discount program only to find that their competitor's products are available to their employees through the service.

A parallel trend is the emergence of the corporate intranet as a valuable platform for knowledge management and information dissemination within a company; and HR professionals are beginning to see the intranet's potential as a tool for employee relationship management and improving organizational efficiency. It is also common to provide information from external sources over the corporate intranet; stock quotes and news, for example.

With the advent of Internet portals, it has become common to provide a single point of access to aggregations of information and services over the Internet. Extranet technology makes it possible to link intranets to larger controlled-access networks over publicly accessible telecommunications networks.

Various methods of providing goods and services in online environments are known. R. Filepp, M. Gordon, A. Bidwell, F. Young, A. Wolf, S. Meo, D. Tieman, R. Cohen, M. Bellar, K. Appleman, L. Abrahams, M. Silfen; *Reception system for an Interactive Computer Network and Method of Operation*; U.S. Patent No. 5,347,632 (September 13, 1994) disclose the architecture and method of using an interactive, online computer system. Information and services are provided to users based upon pre-determined parameters, locale or demographics, for example. Filep, et al, do not teach the provision of information and services to employees of a company over a corporate intranet. The service cannot be customized and branded to an individual company. The system of Filep, et al. cannot be administered and configured by a designated Administrator of a client company. Furthermore, Filep et al. does not utilize web technology, and does not provide community tools or communications tools, such as broadcast messaging, employee classifieds, or calendaring.

R. Carlin, J. Frantz II; *Multi-Provider On-line Communications System*; U.S. Patent No. 5,694,549 (December 2, 1997) Carlin, et al. is directed to an online service that allows the provision of information and services from a number of service providers to groups of users through a single gateway. Carlin, et al does not teach provision of information and services to employees of a company through a portal from the company's intranet. Carlin, et al. also does not teach segmenting of employees into target groups and provision of information and services tailored to the needs and desires of such target groups. Carlin, does not teach the publishing of information by an employer for their employees, or the provision of community tools and communications tools within an employee portal. Furthermore, the disclosed service is not configurable by a designated administrator within an employer company.

R. Chelliah, J. Cornez, C. Dellar, S. Harrison, J. Hempe, C. Hsu, E. Golin, C. Price, N. Rutta, T. Wood, W. Yamato; *Computer System and Method for Electronic Commerce*; U.S. Patent No. 5,710, 887 (January 20, 1998). Chelliah, *et al.* teaches a system of electronic commerce, whereby a user may purchase goods and services from any of a number of electronic storefronts. Chelliah, *et al.* is directed exclusively to the providing of electronic commerce to a general population of users. Chelliah, *et al.* does not teach the provision of information and services to the employees of a company through a portal from the company's intranet. Chelliah, *et al.* does not deal with publishing of other content unrelated to electronic commerce. Chelliah, *et al.* does not teach provision of community tools such as employee classifieds, discussion boards, surveying tools, and employee suggestion boxes. Chelliah *et al.* also does not teach the provision of employee profiles, or segmenting of employees into target groups and provision of information and services tailored to the needs and desires of such target groups.

V. Dasan; *Personalized Information Retrieval Using User-Defined Profile*; U. S. Patent No. 5,761,662 (June 2, 1998). Dasan teaches an automated system for retrieving published information based on a user-defined profile. Dasan does not teach provision of information and services to employees of a company through a portal from the company's intranet. While Dasan does teach the ability to personalize the service by the user, the disclosed service cannot be customized or branded and does not teach segmenting of employees into target groups and provision of information and services tailored to the needs and desires of such target groups. Dasan does not teach the publishing information by an employer to employees over a corporate intranet, or the provision of community tools in an employee portal, or the provision of discounts and shopping.

L. Maritzen, R. Dimaandal, J. Gianella, R. Arregui, M. Moss; *Platform-independent, and Access-independent Distributed Quote Configuration System*, U.S. Patent No. 5,870,719 (February 9, 1999). Maritzen, *et al.* teaches the configuration of price quotes to be delivered to a user based on business rules. Maritzen, *et al.* does not teach provision of information and services to employees of a company through a portal from the company's intranet. Maritzen, *et al.* also does not teach publishing of information by an employer to employees over a corporate intranet or the provision of community tools, or the provision of discounts and shopping.

The use of corporate Intranets and corporate portals as a knowledge management tool is known, for example:

5 T. Koulopoulos; *Sharing Knowledge: Corporate Portals: Make Knowledge Accessible to All*; Information Week, April 26, 1999;
<http://www.informationweek.com/7313/31erall.htm>.

10 E. Fitzloff; *Portal Patrol*; Infoworld;
<http://www.infoworld.com/cgi-bin/displayStory.pl?/features/990517portal.htm>.

15 B. Roberts; *Portals, You Say? This One's Private*; Internet World; December; 14, 1998;
<http://www.internetworld.com/print/1998/12/14/intranet/19981214-portals.html>.

20 S. Teileen; *Discussing the Relevance—and Future—of Intranet Portals*; Internet World; March 8, 1999;
<http://www.internetworld.com/print/1999/03/08/intranet/19990308-advisor.html>.

25 A. Angelica; *Business Data Finds a Home on Custom Portals*; TechWeek; February 22, 1999;
<http://www.techweek.com/articles/2-22-99/portals.htm>.

30 L. Kujubu; *Corporate Portals Grow, Get Outsourced*; CNN.com; August 27, 1999;
<http://www.cnn.com/TECH/computing/9908/27/outportals.ent.idg/index.html>.

35 All of the above discuss the corporate intranet primarily as a knowledge management tool, with the occasional provision of externally acquired information. They do not teach the provision of information and services to employees of a company through an extranet portal from the company's intranet, or providing discounts and shopping; and they do not teach the provision of community tools and communications tools in an employee portal.

<http://www.healthvision.com/empportal.asp> discloses an employee portal service having human resource applications, shared calendar access, automated expense reporting, online e-commerce catalogs and best practices databases. The disclosed service doesn't provide community tools in an employee portal such as employee classifieds, discussion boards, surveying tools, and an employee suggestion box. Furthermore, the disclosed service does not

provide segmenting of employees into target groups, provision of information and services tailored to the needs and desires of such target groups, customization, branding, or personalization.

- 5 Various services for providing employee discount programs over the Internet are known, for example:

www.employeesavings.com

www.rewardsplus.com

www.beyondwork.com

10 www.youdecide.com

www.employee discos.com.

All of the above provide merchandise and services in various configurations. In most cases they cannot be customized for an employer company or
15 personalized by an individual employee and they do not provide the capability of segmenting of employees into target groups and provision of information and services tailored to the needs and desires of such target groups. They also do not provide communications tools and community-building tools in an employee portal accessible from a corporate intranet.

20

www.iclick.com provides various HR applications over a corporate intranet. The service cannot be customized or branded, and cannot be personalized by an individual employee. The disclosed service does not provide a discount program, and does not provide communication and community tools in an
25 employee portal. Furthermore, the service does not provide the capability of segmenting of employees into target groups and provision of information and services tailored to the needs and desires of such target groups.

It would be advantageous to provide an employee portal linkable to a
30 company's intranet wherein information and services are delivered to employees of the company through an extranet portal. It would be a further advantage to provide access to online shopping, wherein employees may take advantage of merchandise and services offered at discounted prices. It would be desirable to provide the capability of customizing the service, so that it could be branded with
35 the employer's corporate identity and the mix of goods and services tailored to the employer. It would be desirable to provide the extranet portal as a leasable software application.

It would provide yet another advantage to embed communications tools and community-building tools in the extranet portal with which an employer could publish information to employees such as broadcast messages, company calendars, and employee suggestions. It would be further advantageous to provide tools for facilitating the development of community among employees, such as employee classifieds, discussion boards, and group calendaring. It would be desirable to provide a means of segmenting employees into various target groups and to tailor provided information and services to the needs and interests of the various target groups.

It would be an advantage to provide a controlled-access administrative module, so that a designated Administrator could perform publishing and administrative functions. It would also be desirable to provide individual employee accounts with employee profiles, so that individual employees may personalize the portal according to their own needs and interests, and to make the employee portal access-controlled.

SUMMARY OF THE INVENTION

The invention provides an Employee Portal for aggregating and delivering services and information to employees over an employer company's intranet that includes

- An extranet portal linked directly to the employer's intranet
- A shopping mall, accessible through the portal where employees may purchase discounted goods and services;
- An assortment of communications and community-building tools embedded in the portal for publishing information to employees and developing community among employees.

The invented Employee Portal is customizable, and can be branded with the employer's corporate identity. The portal is a scalable software application leased from a service provider, viewable as a multi-frame window in a web browser.

The Employee Portal is presented in different functional areas including:

- Home
- Discount
- Community
- My Account

- Help
- Admin;

wherein each functional area comprises a separate web page.

5 The communications tools include:

- Company bookmarks
- Employee suggestions
- Broadcast messaging
- A company calendar, and
- 10 • Surveys

The community tools include

- Discussion boards
- Group and individual calendars, and
- 15 • Employee classifieds.

Certain of the communications tools are viewable across multiple functional areas. The Employee Classifieds and the Broadcast Messages, for example, are accessible from the Portal Home Page and from the home page of the
20 Community area.

The Shopping Mall is accessed from the Discounts section. The vendors are categorized and the goods and services are viewed from individual vendor sites. Purchases are transacted online.

25

The Admin section, access-controlled, provides a series of publishing and administrative functions. Employees may be segmented into various target groups and the services and information targeted to the needs and interests of the various target groups.

30

The My Account section allows individual employees to edit their employee profile and to personalize the Employee Portal.

35

Advantageously, a separate, logically distinct portal space is created for each customer. Physically separate instantiations of the portal application are not required. Thus, a portal may be deployed very rapidly at a comparatively low cost. A rule-based configuration tool segments each customer's employee population into target groups and provides customized content and services

targeted to the needs and interests of the various target groups according to rules specified by the employer.

BRIEF DESCRIPTION OF THE DRAWINGS

5

Figure 1 shows a home page on a company intranet having a link to an Employee Portal, according to the invention;

10

Figure 2 shows a home page for a Home functional area of an Employee Portal, according to the invention;

Figure 3 shows a listing of Broadcast Messages, according to the invention;

15

Figure 4 shows a screen of a tool for administering Broadcast Messages, according to the invention;

Figure 5 shows a screen for creating a new Broadcast Message, according to the invention;

20

Figure 6 shows a home page for a Discounts functional area displaying a listing of vendor categories, according to the invention;

Figure 7 shows a listing of vendor sub-categories and vendors, according to the invention;

25

Figure 8 shows a Featured Discounts section, according to the invention;

Figure 9 shows an order form for the Discounts area of Figure 6, according to the invention;

30

Figure 10 shows a home page for a Community functional area, according to the invention;

35

Figure 11 shows a Company Main Calendar view of a Calendar Tool in the Community area of Figure 10, according to the invention;

Figure 12 shows a dialog box for publishing notices to a Bulletin Board in the Calendar Tool of Figure 11, according to the invention;

Figure 13 shows a user interface to a Personal Organizer in the Calendar Tool of Figure 11, according to the invention;

5 Figure 14 shows a pull-down menu for selecting different views in the Calendar Tool of Figure 11, according to the invention;

Figure 15 shows a user interface to a tool for administering Private Groups, in the Calendar Tool of Figure 11, according to the invention;

10 Figure 16 shows a Personal Calendar view of the Calendar tool of Figure 11, according to the invention;

Figure 17 shows a detail of a tool for publishing and viewing Employee Classified Ads, according to the invention;

15 Figure 18 shows a listing of categories for Employee Classified Ads, according to the invention;

Figure 19 shows a listing of Employee Classified Ads, according to the invention;

20 Figure 20 shows a detail of an Employee Suggestion tool, according to the invention;

Figure 21 shows a form in a My Accounts functional area for entering and editing contact information for an individual employee, according to the invention;

Figure 22 shows a home page of an Admin functional area, according to the invention;

30 Figure 23 shows a main screen for an Employee Access tool, according to the invention;

Figure 24 shows a search screen for the Employee Access tool of Figure 23, according to the invention;

35 Figure 25 shows a search results screen for the Employee Access tool of Figure 23, according to the invention;

Figure 26 shows an Employee Profile screen of the Employee Access tool of Figure 23, according to the invention;

Figure 27 shows a Vendor Publishing tool, according to the invention; and

Figure 28 shows a screen of a vendor page creation wizard in the tool of Figure 27, according to the invention; and

Figure 29 shows a block diagram of the functional architecture of an Employee Portal, according to the invention.

DETAILED DESCRIPTION

An Employee Portal assists employees in maintaining a harmonious balance between workplace demands and personal life by providing them with an aggregation of useful information and services. The portal provides:

- An online shopping mall in which they may purchase a variety of goods and services from pre-screened vendors at deeply discounted prices and rates. The shopping mall allows employees to shop for merchandise, financial services, recreational opportunities and travel services to maintain and enhance their personal lives in a time-efficient and cost-effective manner without having to leave their workplace.
- A collection of communications tools to facilitate communication between employer and employees.
- A collection of community tools to promote the development of a community among employees.

The Employee Portal provides the Human Resources department of the employer company with a cost-effective way to provide ancillary benefits, and to manage relationships with employees in order to enhance commitment to the company among the community of employees.

Figure 29 provides a block diagram of the functional architecture of an Employee Portal 290. A configuration tool 291 is used to create logically separate, virtual instances 293 of the employee portal, tailored to meet the specific needs of each

employer customer. The portal provider creates each of such instances by creating a new customer, exemplified in Figure 29 by Companies A, B, or C, and then configuring and assigning various information entities 295 to the portal space 293 created for the customer. Once the portal space has been created and deployed, an administrator, typically a human resources representative of the employer customer uses an HR Administration tool 292 to perform administrative tasks such as adding and deleting employees, configuring and administering the information entities 295, and in some cases, creating new entities, for example, broadcast messages and local merchants. Customer entities, employee entities, and all information entities are housed in an employee portal database 294. Additional functional components of the Employee Portal 290 include a portal engine 296, a company and user profiling and targeting engine 297, a presentation and template engine 298 and a security layer 299. It will be apparent to those skilled in the computer science and automatic data processing arts that the various functional components of the employee portal may be implemented in a variety of ways. They may be separate modules within a single software application, or they may be separate, but related software applications. Finally, they may be separate hardware components programmed to perform each function. The several components of the Employee Portal are explained in greater detail herein below.

Referring now to Figure 1, the home page 10 of an employer company's intranet is shown. The intranet is viewable in a web browser from any employee's computer, as the employer may have it configured. Access to the Employee Portal is gained through a hyperlink 11 from the company's intranet. To gain access to the Employee Portal, the employee follows the indicated hyperlink. Access to the Employee Portal is controlled through a sign-on facility. The sign on facility can be configured so that the sign on is automatic, granting the employee immediate access to the Employee Portal, or the sign-on can be manual, in which case the employee is required to supply a user name and a password to access the portal. Employees may access the portal from the employer's premises or from a remote location such as a home office.

Referring now to Figure 2, after the employee follows the hyperlink to the Employee Portal, the Home Page of the Employee Portal is presented in the window of the web browser. The Employee Portal is a customized extranet accessible from the employer company's intranet. While the current embodiment of the invention is provided over publicly accessible telecommunications networks, the Employee Portal is not publicly accessible; access being limited to

those individuals specified by a designated Administrator of the Employee Portal. Typically, the designated administrator is a human resources representative of the employer company. The Employee Portal is co-branded with the logo of the employer company 21 as well as the portal provider. The appearance of the Employee Portal can be further customized by the provision of a customized welcome message 22.

The invented Employee Portal is a scalable, customizable software application leased to the employer company by a service provider. One skilled in the art will appreciate that the invention is provided using commonly known Internet portal technology.

Home Page

The view that greets the employee as they log onto the portal may vary according to the configuration set by the Administrator. The Administrator may enable and disable communications and community tools according to the needs and preferences of the employer company. In the exemplary Employee Portal of

Figure 2, the employee's personal calendar 23 for the day is displayed alongside a listing of employee-published classified ads 26, both tools described in greater detail further below. A pull-down menu of company bookmarks 24 is visible, granting the employee ready access to a variety of frequently accessed documents and Internet sites. A listing of Broadcast Messages 25 is also visible. Broadcast Messages are a convenient tool for disseminating information and announcements across an organization. The Broadcast Message may also be published to specific target groups of employees, a single department or team for example. Thus the content of the message may be targeted to a specific target group. The capability of targeting information and services to the needs and interests of specific target groups is common to many of the tools incorporated into the Employee Portal, and is discussed in greater detail below.

Unlike prior art implementations of portals; the invented Employee Portal has the capability of segmenting a population of users into target groups. A rule-based configuration tool allows the segmenting of the employee population into target groups of any size and configuration according to the employer company's business rules. Therefore, employees may be segmented according to work group, or geographic area, or management level or any other group required by the employer's business rules. The segmenting capability is highly flexible,

- allowing for extremely large target groups and conversely, even a target group of one. Typically, the target groups and the rules for membership are established by the employer and furnished to the service provider prior to deployment of the Employee Portal within the company. One skilled in the art will appreciate that the target groups are not static. That is, they are not lists of employees saved to a database. Rather, the configuration tool evaluates in real time whether an employee qualifies for membership in a specific target group according to the rules specified for target group membership.
- Most of the services provided by the Employee Portal may be targeted according to membership in such segmented target groups. For example, the Human Resources department may wish to publish a Broadcast Message alerting a marketing group in a specific geographic region to an upcoming marketing seminar in that region. At the time that the Administrator publishes the message, they can specify that the message only be published to the desired marketing group. The message will only be published to those who satisfy the requirements for membership in the target group; no one else will see the message.
- The Home Page described above is exemplary only. The Home Page may incorporate any of the following services and tools:
- Calendaring
 - Employee Classifieds
 - Employee Suggestions
 - Broadcast Messaging
 - Company Bookmarks
 - Discounts search, and
 - Featured Discounts
- The HR Administrator, who can enable or disable any of the tools, determines whether or not a service or tool is available to the employee population. Alternatively, they may grant certain target groups access to a particular tool and deny access to other target groups.
- The provided suite of communications tools includes:
- Company bookmarks
 - Employee Suggestions
 - Broadcast Messaging, and
 - Company Calendaring

- Suggestion Box

The invention also provides the employer with the capability of granting employees access to externally acquired information resources such as news, stock quotes, and weather.

The provided suite of Community Tools includes:

- Discussion Boards
- Group and individual calendaring
- Employee Classified Ads

Each of the above communications and community tools will be described in greater detail below with reference to the functional area of the Employee Portal within which they chiefly reside.

Still referring to Figure 2, a series of tabs across the top of the page grant access to the major functional areas of the Employee Portal. These areas include:

- Home
- Discounts
- Community
- My Account
- Help, and
- Admin

Each of the major functional areas comprises a home page with several supporting pages. Some of the features of the Home functional area, represented by the Home Page have already been described.

Some of the communications and community tools are visible across more than one of the functional areas. For example, Employee Classifieds may be viewed from the Home Page or from the Community Page. An Employee may view their individual calendar from the Home Page or the Community Page.

Figure 3 shows a detail of the Company Bookmarks pull down menu and the Broadcast Messages. Both tools can be viewed by the entire employee population or the HR Administrator may make either of the tools accessible to selected target groups only. Both tools are read-only to the employee user. Company Bookmarks and Broadcast Messages are published by the HR

Administrator using corresponding publishing tools accessible through the Admin area.

Bookmarks

- 5 Bookmarks serve as a time saving tool for HR. They can be used to supply company-specific information and to easily answer frequently asked questions. For example, if HR receives repeated information requests from employees wanting details about their benefits, 401k plan or other company policies, HR can publish a Bookmark to the entire company, or to specific target groups, linking
- 10 them to a site on the corporate intranet or the Internet that can answer their questions for them. Bookmarks can also be used to send out links to the company phone list, industry-related Websites and pages on the corporate intranet that may otherwise get overlooked.
- 15 As previously indicated, Bookmarks are created by HR, using a Bookmarks option in the Admin area. The Bookmark tool is forms-based, requiring the filling out of form-fields, including:
- Name of Bookmark
 - URL
 - 20 • Folder (optional) The Bookmark can be assigned to a folder. Creation of folders is described below. A folder can be chosen from a pull down menu of available folders.
- 25 Folders are an organizational tool for categorizing Bookmarks and other information products of the Employee Portal. Folders make it easier to locate Bookmarks and are therefore a time saving tool for both the employee user who is looking for information and the HR administrator who wants to edit or delete a Bookmark.
- 30 The HR administrator may create folders by selecting the 'Add Folder' button of the Bookmarks tool, naming the folder and specifying who the folder should be visible to: the entire company, or selected target groups. Bookmarks may also be edited and deleted. Deleting obsolete bookmarks diligently increases the
- 35 tool's effectiveness. Folders may also be deleted. Bookmarks within a folder are deleted with the folder.

Broadcast Messages

Broadcast Messages are a convenient way to send news flashes, reminders and concise information to target groups within the employer company, thereby enhancing communication between the employer and the employees.

5

Broadcast Messages appear on the employee user's Home Page and Community pages under the heading 'My News from HR.' A typical Broadcast Message has three parts:

- the headline
- 10 • the detail or text, and
- an optional link to additional information.

Broadcast Messages appear on the employee user's Home Page and the company Community page under the heading, "My News from HR."

- 15 To create a Broadcast message, shown in Figure 4, the administrator selects the Broadcast message option Admin area, which grants access to a listing of all current messages, and presses the provided 'Add new message' button 41. A form is presented, as shown in Figure 5, and the provided fields are filled-out:

- Headline (51)
- 20 • Message detail (52), and
- optionally (52), a URL link.

- The HR administrator then specifies recipients for the message. Broadcast Messages can be published to a Target Group, or they may be sent globally, ensuring that everyone who signs on to the Employee Portal will see the message. Finally, effective dates for the message are specified, and it is published after it is saved. All messages are retained in a database hosted by the Employee Portal service provider until the HR administrator deletes them. To maximize the effectiveness of the tool, the Administrator should regularly purge out-of-date messages.
- 25
- 30

Discounts Area

- Access to the Shopping Mall is gained through the Discounts area. Figure 6 shows the Discounts Home Page. The vendors are grouped by category and sub-category, with the list of categories displayed in the Table of Contents Frame 31 and again in the main content frame 32 of the window. Both categories and vendor list are customizable by the HR Administrator, which provides the employer with an important advantage. Since the Administrator can prevent any vendor from being displayed, employers are able to avoid conflict-of-interest
- 35

situations in which the list of available vendors includes a competitor, thus the employer is prevented from having to offer the competitor's products for sale to their own employees. The Administrator can also prevent any category or sub-category from being displayed. In addition to being able to turn a vendor or discounts sub-category or category off, the employer can also selectively provide access to various target groups. The employer is thus able to create customized shopping areas for different groups of employees. Such groups may be subsidiaries or regional offices. The vendor relationships are established by the Employee Portal service provider, in which the vendors agree to provide services and merchandise to users of the Employee Portal at deeply discounted prices. The relationship is advantageous to the vendors because they gain access to a pool of highly qualified prospective buyers.

The employee views a vendor's products through direct access to the vendor's site. Those skilled in the art will appreciate that the Discounts area constitutes an extranet, to which the company intranet is linked through the Employee Portal. Access to the extranet is limited to account holders of the Employee Portal.

A Featured Discounts Section 33 allows special promotions and commercial discounts. As the detail view of Figure 8 shows, the Featured Discounts section can be viewed from other areas as well as from the Discounts Page. Figure 7 shows a listing of sub-categories 71 and vendors 72. While most purchases are transacted directly with the vendors at the vendor site, certain products and services may be purchased from the Employee Portal service provider, for example movie tickets or tickets to amusement parks. Figure 9 provides a view of an exemplary online order form 91 to be filled out by the employee in purchasing products from the service provider. The My Account area, described below, allows the employee to enter contact information in a form and save it; subsequently, the fields of order forms in the Discounts area may be automatically populated with the employee's contact information, sparing the employee the time and effort required to fill out order forms repeatedly.

Community Area

The Community tab gives the employee access to the Community home page. As Figure 10 shows, some of the services available from the Home Page can also be accessed from the Community home page: Company Bookmarks 24, Broadcast Messages 25, and Employee Classifieds 26. An employee Suggestion Box 101 is described further below.

Calendaring Tool

The Company Calendar 102, published by the Administrator, is read-only to the employee in the default condition. The Administrator may publish one or more Company Calendars, and the administrator may also publish public groups, each public group having a calendar. While the various calendars have been previously described as separate tools, the calendaring function in the Employee Portal is actually provided by a single calendaring tool that allows Company, Group and Individual views. The calendaring tool provides the following features:

- Calendar: a calendar is associated in a one-to-one relationship with a group. Each group has a calendar and each calendar is associated with one group. Groups can be private or public.
- Public Group: Public groups are only published by those having administrator access. Public groups are organized into browse-able categories and sub-categories; Public groups must be placed at the sub-category level. Users can view public group info (calendar, contacts, bulletin board), but do not join (*i.e.* there is no member list associated with public groups). The HR administrator sets read/write permissions to the various functions (to-do, calendar, bulletin board, contacts) of public groups.
- Private Group: Private groups are created by employee users. The administrator (creator) of a private group can set read/write access to the various functions (to-do, contacts, bulletin board, etc) as well as decide who gets to join the group. Entry to private groups is either by the invite method or the password (key) method. In the key method, an employee user requests the key for a group from the group administrator.
- My Personal Organizer: This is simply a group with one member (the owner) with no read or write access by any others and no ability to invite other members to view one's personal organizer. This is a user's private workspace. The employee may subscribe to other public or private group events from their personal calendar so that these outside events appear on their personal calendar.
- Event Subscriptions: Or simply, "Subscriptions", allows an employee user to include other event information on their personal organizer. The user can subscribe to public or private group events. Subscriptions are at

an event level only. This is to avoid confusion, plus the “Views” described below give the user calendar level viewing control.

- Categories: HR defines the Categories and Sub-Categories where the public groups/calendars that they publish will appear. Only HR can publish public groups and all of these public groups must appear within a sub-category of this structure. Sub-categories and Categories can be deleted, but if any groups are contained within, HR will be warned before deleting the category or sub-category. Public groups can be easily reassigned to any category and sub-category.
- Views (roll-ups): Views are simply groupings of calendars “rolled-up” or overlaid on a single calendar view. The current “All Groups” option on the pull-down navigation list within is a view of the roll-up of all of the users calendars/groups. Two types of views are provided: Company-defined, and User-defined. Views put the system into a read-only mode where new events cannot be added until the user changes into a specific group.
- Company Views: HR can define as many views as they wish to appear in the “Company Views” part of the drop-down navigation list. These Company Views are set in the Admin area. Each of these views can contain roll-ups of as many public groups as the HR Administrator desires. Only public groups are allowed in Company Views. Users cannot edit or delete Company Views from their drop-down navigation lists.
- User-defined Views: Users have the ability to define their own views to appear in the “My Views” section of the drop-down navigation list. This will allow them to group their favorite public and private groups into single calendar overlays/roll-ups.

An Exemplary Company view is shown in Figure 11. As mentioned above, a discussion board feature 111 allows users to view notices published to the discussion board and to publish notices of their own. A typical use for the discussion board would be to publish referrals: for example a dependable baby-sitter or a good restaurant. As shown in Figure 12, to publish a notice, an employee user accesses a form 121; fills it out; and clicks a “post item” button 122, and the notice is published. As previously noted, group administrators set

permissions for the discussion board: either HR for public groups, or the group creator in the case of a private group.

As shown in Figure 13, the personal organizer provides the following tools:

- 5 • New messages (131)
- New invitations (132), and
- A To-do list (133).

10 As shown in Figure 14, a pull-down menu 141 gives the user convenient access to all of the views available. These may include company calendars, bulletin board, employee classifieds, and group calendars. A group management tool 142, shown in detail in Figure 15, allows the employee to manage their participation in the various private groups to which they may belong.

15 As shown in Figure 15, the group management tool previously mentioned includes the following tools:

- Invite people to join (151)
- Edit group (152)
- Delete group (153)
- 20 • Edit secret key (154).

Figure 16 provides a detailed view of an individual Calendar view 23 as it is displayed on the Employee Portal Home Page. The view also includes Employee Classifieds 26. Figure 17 provides a detail of the Employee
25 Classifieds tool on the Community home page. The Employee Classifieds tool provides the following features:

- User definable ad duration. Ads expire upon end of duration, unless extended.
- Ads in List View are sortable by column headers (date, title, price, city, ad type).
- 30 • Separate "Ad Title" and "Description" fields.
- Classified in categories and sub-categories.
- Graphics/logos to visually identify categories.
- Ad types: "for sale" or "wanted".
- 35 • Classified ad URL clickable (spawns new browser window filled with ad URL).
- General user agreement "classifieds terms of participation."
- Optional Attachment of 1 photo per ad.
- Featured discount banners within categories for cross-merchandizing.

- Confirmation message upon ad submission or update.
- “Firm” and “Best Offer” choice for “for sale” ads.

Figure 18, shows a listing of classified ad categories and sub-categories 181 with graphical visual indicators 182. Each category is a clickable hyperlink that takes the user to a succeeding page. Figure 19 shows the individual classified ads in list view 191. As previously mentioned, the ads are sortable by column header.

The Employee Portal incorporates A Suggestion Box 101, shown in Figure 18, within the Community area of the portal to allow employees to give feedback to HR or the Employee Portal service provider.

The Suggestion Box Tool provides:

- Employees a forum to submit ideas to the company.
- HR a tool for promoting, tracking, implementing, and rewarding suggestions.

The Suggestion Box lies in both the Community Area Employee of the Portal and in the Admin area. The suggestion box tool is form-based and allows for suggestions to be submitted (optionally anonymously) into various programmable categories. Most of the functional components of the tool reside within the Admin section, allowing HR to set suggestion categories, set-up e-mail distribution lists, and track, organize, and act on suggestions. In the community area, the basic form is presented to the employee.

When submitting a suggestion, an employee is required to fill in the following form fields:

- Suggestion Category – employees use a pull down menu to choose a suggestion category.
- Suggestion title.
- Your suggestion – In the field, employees type in a suggestion and it's potential impact.

The employee may then be asked the following questions:

- “Would you like your suggestion sent anonymously?” If this option is chosen, the employee will not receive a reply to their suggestion.
- “Would you like to allow your idea to be publicized.” If this option is selected HR may elect to publish the suggestion, as a Broadcast message, for example.
- “Would you like to serve on an implementation team?”

If the employee suggests the anonymous option, the subsequent questions are grayed-out or hidden. HR configures the appearance of the form, including:

- An introductory message at top of form and a confirmation/thank-you message.
- The selection of available suggestion categories.
- Which of the three optional questions appear.

The employee submits the suggestion, by clicking a submit suggestion button.

Once the “submit suggestion” button is clicked, the entry is recorded in a suggestion database hosted by the Employee Portal service provider, and an e-mail message is automatically sent to the e-mail addresses that HR has configured for that category.

From the Admin area, the HR administrator accesses the various suggestion management and suggestion box functions. Suggestion management involves:

- Viewing suggestions
- Assigning a status to suggestions
- Replying to suggestions, and
- Deleting old suggestions from the database.

The HR administrator may also set the introductory message, the confirmation message, and the optional questions. From the Admin area, categories may be edited and deleted and entirely new ones created. Additionally, the HR administrator may also turn off the suggestion box so that it is completely unavailable.

My Account Area

As Figure 21 shows, the My Account area is accessed from the ‘My Account’ tab 211. A menu of options 212 includes:

- Contact Info
- Transactions
- Product Interests
- Service Interests
- Event Reminders, and
- Change Password.

‘My Account’ gives the individual employee user the capability to personalize and manage their Employee Portal account.

The 'Contact Info' option allows the employee to enter and save their contact information, both for home and work. After the employee supplies the contact information, it is automatically supplied to fill out forms for purchases in the Discounts area. Employee users may also edit previously supplied contact information.

The 'Transactions' option allows the employee to view a record of purchase transactions.

10 The 'Product Interests' option allows the employee user to indicate general product categories in which they are particularly interested. The information is captured by the Employee Portal service provider, and later utilized to target discounts and promotions to the needs and interests of the employee user.

15 The 'Service Interests' option functions in the same manner as the 'Product Interests' option, previously described. The employee user indicates general service categories in which they are particularly interested. As with the 'Product Interest' information, the information is captured by the Employee Portal service provider for subsequent use.

20 The 'Event Reminders' option allows the employee user to specify dates and events, such as important birthdays, about which they would like to be reminded by means of a notice published to their personal calendar.

25 Finally, the 'Change Password' option allows the employee user to change their password for access to the Employee Portal.

Admin area

Figure 22 provides a view of the main page of the Admin functional area. The Admin area houses an array of administrative and publishing tools with which the HR administrator may manage and configure the Employee Portal. The options accessible from the main Admin page are:

- Bookmarks
- Broadcast messages
- 35 • Calendar
- Classified
- Discounts
- Employee access
- Suggestions

- Vendor Publication
- Help

Employee Access

5 Most of the administrative functions have previously been described in the foregoing discussion. Attention is directed, however, to the 'Employee Access' option. The Employee Access tool allows the HR administrator to add new employee users, to deactivate employee users, and to edit employee profiles. Figure 23 shows the main page of the Employee Access tool. A first button 231
10 allows the HR administrator to create a new employee profile, whereby portal access is given to a new employee. A search button 232 gives the Administrator access to a screen for searching the database for an existing employee profile for subsequent editing or deactivation. Referring now to Figure 24, the search screen is shown, with fields 241, 242 for the last name and first name. After entering the
15 employee name in the provided fields, clicking a search button 243 executes the search. Figure 25 shows a search results screen, with a list of employee names 251 meeting the search criteria. Access to the employee profile is gained by following the employee's name hyperlink. Figure 26 shows an employee profile screen providing contact information 261, custom fields 262, specifiable by the
20 HR administrator, portal access dates 263, wherein the dates for which the employee is to be granted access to the Employee Portal are specified, and edit 264 and cancel 265 buttons. Clicking the edit button allows changes to be made to the information in the form fields.

25 In the case of creating a new profile, the Administrator clicks the 'create new profile' button 231, causing a blank profile form to be presented, with the newly created record being saved to the database of employee profiles, hosted by the Employee Portal service provider. New employee profiles may also be created by the Employee Portal service provider, either before deployment of
30 the Employee Portal in the employer company, or as periodic updates to the database of profiles. A large number of profiles may be created globally using a data file provided to the Employee Portal service provider by the HR Administrator. The data structure for the data file specifies all the information required to create an employee profile.

Vendor Publication

The Vendor Publication option allows the HR administrator to create pages to be viewed in the Discounts Area for vendors that the employer company may have an established relationship with, independent of the vendors provided by the

Employee Portal. In Figure 27, a list of such vendors 271 is displayed on the main page of the Vendor Publication Tool. A 'create vendor page' button 272 launches a wizard application that guides the HR administrator through the creation of a new vendor page. Figure 28 shows a view of the Vendor Page Creation Wizard. Once a new vendor page is created and saved, the vendor is displayed in the vendor list. To activate the page, the corresponding 'Active' box 273 is checked; the 'Activate selected vendors' Button 274 is clicked; and the vendor is published to the Employee Portal.

10 Help

The Help section is accessed from the Help tab. The Employee Portal provides user Help for employee users and Admin Help for administrative and publishing tools. The Help home page is organized as a hyperlinked Table of Contents structured to mirror the categories and functions of the Employee Portal. The following Help categories are provided:

- Sign On Help
- Discounts Help
- Community Help
- My Account Help
- Security and Privacy
- Contact Us

Each Help category has sample topics to give the employee user an idea of the type of information associated with a particular topic. Selecting any of the Help category hyperlinks navigates the employee user to the Help page for that category. If a sample topic is selected, the user will be navigated to the associated help screen and taken directly to the section that pertains to the selected link. Each Help category has a link to an email form, to contact the Employee Portal service provider, in case a user is unable to locate the desired information.

The Admin Help page is similar to the User Help page in organization and function. The Help categories in the hyperlinked Table of Contents mirror the Employee Portal and Admin tool categories, and sample topics are provided, as with User Help. Additionally, a FAQ section is provided.

35 Reports

The Employee Portal also incorporates a report-generating functionality. The Reports function is accessible only to administrative employees of the Employee Portal service provider. Typical target audiences for the reports are:

Sales, Marketing, Customer Service, and Management employees of the Employee Portal service provider, although certain of the reports are available to clients, that is, employer companies, and vendors, as well. The reports are rendered using a commonly known report-writing tool. Some reports are generated automatically at specific time intervals, daily or weekly for example, and others are generated on demand. The typical method of distributing and viewing reports is online, through a web browser. In general, report content deals either with Employee Portal usage or revenue generation.

Configurator

A novel configuration tool, the configurator 290, allows for logical separation of each employer customer's portal space, rather than necessitating the creation of physically separate instances of the portal application for each employer. Thus, a portal may be very rapidly deployed at a cost significantly lower than that of conventional portal implementations.

As previously described, fundamental to the invention is the capability of delivering various types of content to target audiences. In essence, both the portal provider and the individual companies create resources that are targeted to specific groups. In the case of the portal provider, the target groups are specific companies, or employer customers. In the case of the employer customers, the target groups are specific departments or specific offices; or the target groups may be defined by any combination of other variables that describe an employee. Consequently, the configurator serves to enable the portal provider and the employer customers in defining the various content entities and distributing them to specific audiences.

Entities are created by different stakeholders, as shown in the table of exemplary entities below:

Provider	Customer	Employee
Category	Broadcast message	Classified
Sub-category	Sub-category	
Vendor	Vendor	
Featured discount	Calendar	
	Survey	

Thus, certain entities may be created either by the portal provider or by the customer.

Entities created by the portal provider are rolled out in a multi-stage process.

5 Briefly, the stages of the process are:

- Induction – a. create the entity in the portal database and b. assign initial status of “new” and “inactive.”
- Assignment – a. assign entity to companies, either piecemeal or during a mass rollout and b. company accepts an entity and thus changes status to
- 10 “not new.”
- Activation – a. company activates or deactivates entity and b. assigns a target group.
- Maintenance/ administration

15 The section below describes the processes of induction and assignment of the various entities.

Customer

Deploying a portal for a new customer entails the creation of a new customer entity.

Customer List screen

- displays a list of customers currently defined in the system. A hot link is provided for each customer that navigates the user to the Customer Definition screen in ‘modify’ mode;
- 25 • New Customer – new customer link navigates user to Customer Definition screen in ‘Add’ mode.

Customer Definition screen

- ‘Modify’ mode allows current customer records to be edited or
- 30 deleted;
- ‘Add’ mode allows creation of new customer record;
- ‘Save and continue’ navigates user to ‘Employee Record’ definition screen.

Employee

35 Employee Record Definition screen

- Used to define fields for the employee record that are particular to a customer. Fields may be defined to have a finite set of values or plain text fields.

- The aforementioned fields of employee information provide the basis for the creation of target groups that can be used to tailor information and services provided to employees
- If some fields are defined to have finite sets of values, 'Save and continue' navigates user to the Maintain Company Lists screen.
- 'Cancel' returns user to main configurator screen.

Maintain Company Lists screen

- Used to maintain customer-specific employee fields whose values are selected from predefined lists;
- Clicking on field name from a list of fields allows the user to define a list of possible values for the field.

Vendor

Vendor List screen

- Displayed when user clicks vendor definition link from main configurator screen. Portal provider specified vendors and company-specific vendors are displayed in separate lists, lists are displayed in tree format, *i.e.* vendors having child vendors indicated by a triangle icon. Clicking the triangle expands and collapses the list
- Clicking on 'Add new vendor' link navigates user to Vendor Definition screen in 'Add' mode;
- Clicking on a vendor navigates user to Vendor Definition screen in 'Modify' mode.

Vendor Definition screen

- Vendor records for portal provider specified vendors and company-specific vendors are edited in 'Modify' mode;
- New vendors are defined in 'Add' mode;
- Current vendors are deleted.

Target Group

Target Group List screen

- Global target groups and customer specific target groups are presented in separate tree lists;
- Trees are expandable and collapsible;
- 'Add' navigates user to Target Group Definition screen in 'Add' mode;
- Clicking a current group name navigates user to Target Group Definition screen in 'Modify' mode.

Target Group Definition screen

- Displayed either in 'Add' or 'Modify' mode, based on user action;
- Target groups are defined using Boolean statements;
- 5 • Global and employer-specific target groups may be defined;
- Target Groups may be deleted;
- New groups may be defined.

Market Place10 **Market Place Definition screen**

- Displays categories, sub-categories and vendors in tree lists;
- Categories and sub-categories can be modified, created, and deleted;
- Vendors are assigned to categories and sub-categories.

15 **Category Definition Screen**

- 'Add' mode allows creation of new category;
- 'Modify' allows editing of current category;
- Current categories may be deleted.

20 **Sub-category Definition Screen**

- 'Add' mode allows creation of new sub-category;
- 'Modify' allows editing of current sub-category;
- Current sub-categories may be deleted.

25 **Assign Vendors to Market Place screen**

- Categories and sub-categories are populated with vendors in either 'Add' or 'Modify' mode;
- Vendors may be deleted from a category or sub-category.

30 **Assigning Entities****Entity Assignment screen**

- A customer is selected from a list of customers, and appropriate categories assigned to the customer;
- Relevant sub-categories are assigned from the categories just chosen;
- 35 • Global target groups and employer-specific target groups are assigned;
- Vendors are assigned to the customer.

Assign Resources to Customer screen

- Rather than selecting a customer and assigning entities, as in the above screen, this screen allows selecting a particular entity and assigning it to all relevant customers.

5 In the process of assigning these entities, the central administrator has created a logically separate, virtual instance of the employee portal, tailored to meet the specific needs of the employer customer.

Corporate Community

10 Corporate Community screen

- Displays current corporate community items;
- Grants access to Corporate Community Definition screen for editing or adding new corporate community items;
- Grants access to Classified ads management.

15

Corporate Community Definition screen

- 'Add' mode allows creation of new item, 'Modify' allows editing of current item.

20 Classifieds Section Definition screen

- Displays list of current classifieds categories and corresponding icons organized as tree list;
- Grants access to Classifieds Category Definition screen in either 'Modify' or 'Add' mode.

25

Classifieds Category Definition screen

- 'Modify' allows editing or deleting a current category;
- 'Add' allows adding a new category.

30 Classifieds Sub-Category definition screen

- 'Modify' allows editing or deleting a current sub-category;
- 'Add' allows adding a new sub-category.

Discounts and Promotions

35 Discounts/.Promotions List screen

- Lists all discounts and promotions that have been defined and that are active;
- Grants access to Define Discounts/Promotions Screen.

Define Discounts/Promotions Screen

- 'Modify' allows editing and deletion of current discounts and promotions;
- 'Add' allows creation of new discounts and promotions.

Placement Strategies List screen

- 5
- Lists all active placement strategies;
 - Grants access to Discount/Promotion Placement Strategy screen.

Discount/Promotion Placement Strategy screen

- 10
- 'Modify' allows editing and deletion of current Discount/Promotion strategies;
 - 'Add' allows creation of new Discount/Promotion strategies.

Marketing Campaign for Customers

Marketing Campaign for Customers

- 15
- Used to define a marketing campaign for a customer;
 - Lists all categories and sub-categories relevant to a customer;
 - select a strategy from a list of strategies.

20 As previously described, client company records, employee records and entities are created in the portal database 294. An exemplary embodiment of the invention includes at least the following tables;

- 25
- Application
 - Bookmark
 - Broadcast
 - Category
 - Category Assignment
 - Classifieds
 - Classifieds Category
 - Classifieds sub-category
 - 30 • Client Company
 - Featured Discount Placement
 - Featured Discounts
 - Merchant
 - Merchant Category
 - 35 • Merchant sub-category
 - Suggestion
 - Suggestion box
 - Suggestion category
 - Survey

- Target Group
- Tasks
- User Profile
- Users
- 5 • Vendor

The tables listed above include all of the major entities of the Employee Portal. However, additional tables are included in the database schema of the Employee Portal; for example, tables to link associated entities. The above
10 listing of tables is provided merely for description and is not intended to limit the invention. Other database schemas equally suitable will be readily apparent to those skilled in the art of database design.

The invention is implemented using conventional programming techniques
15 commonly known to those skilled in the arts of computer programming and software engineering. While the invention has been described herein above in relation to employee portals, the above description is merely exemplary and is not intended to limit the invention. It will be apparent to those skilled in the art that the principles and features of the invention are readily applied to portals of any
20 type, including portals designed to serve the needs and interest of affinity groups of various types.

Therefore, although the invention is described herein with reference to a variety of preferred embodiments, one skilled in the art will readily appreciate that other
25 applications may be substituted for those set forth herein without departing from the spirit and scope of the present invention. Accordingly, the invention should only be limited by the Claims included below.

CLAIMS

5 1. An Employee Portal for aggregating and delivering services and information to employees over an employer company's intranet, comprising:
an extranet portal linked directly to said intranet;
an online shopping mall, accessible through said portal, wherein said
employees may purchase discounted goods and services from an assortment of
10 vendors;

a suite of communication tools;

a suite of community tools; and

an administrative module having controlled access, wherein an Administrator performs publishing and administrative functions;

15 wherein said Employee Portal is customizable to said employer company, and wherein said employees may be segmented into various target groups and said delivered services and information are targetable to needs and interests of said target groups, and wherein said portal can be personalized by each of said employees.

20 2. An Employee Portal as in Claim 1, wherein said Employee Portal is a software application leased to said subscriber by a service provider.

25 3. An Employee Portal as in Claim 2, wherein said Employee Portal is access-controlled, and wherein said employees can access said portal from inside and outside of said company, and wherein access to said Employee Portal is gained through a log-on feature.

30 4. An Employee Portal as in Claim 3, wherein said Employee Portal is presented as a window in a web browser on a computer and wherein said portal is branded with a logo of said employer company.

5. An Employee Portal as in Claim 4, wherein said suite of communications tools comprises:

35 company bookmarks;

an employee suggestion box;

broadcast messages;

a company Calendar; and

optionally, additional information resources, said additional information resources comprising any of stock quotes, weather, news, and editorial content;

wherein provision of any of said tools is controlled by said Administrator.

5

6. An Employee Portal as in Claim 5, wherein said means for facilitating communication among said employees comprises multiple community-building tools, said tools comprising:

bulletin board;

10

group and individual calendars; and

optionally, employee classified ads;

wherein provision of any of said tools is controlled by said Administrator.

7. An Employee Portal as in Claim 6, wherein said Employee Portal has multiple functional areas, said functional areas comprising:

15

Home;

Discounts;

Community;

My Account;

20

Help; and

Admin;

and wherein each of said functional areas comprises a separate home page, viewable in said window.

8. An Employee Portal as in Claim 7, wherein selected tools from said communications tools and said community building tools are viewable across one or more of said multiple functional areas.

25

9. An Employee Portal as in Claim 8, wherein said bookmarks comprise any of company bookmarks set by said Administrator and personal bookmarks set by an individual employee, wherein said company bookmarks are read-only to said employees, and wherein lists of company bookmarks may be targeted to needs and interests of various segmented target groups.

30

10. An Employee Portal as in Claim 7, wherein said Home functional area comprises a Main Home page having multiple sections, said sections comprising:

35

optionally, calendars;

optionally, employee classifieds;

optionally, suggestion box;
optionally, broadcast messages;
optionally, company bookmarks;
discounts search;
5 featured discounts; and
bookmarks;

wherein said optional sections are determined by said Administrator.

11. An Employee Portal as in Claim 7, wherein said community functional area
10 comprises a community home page having multiple sections, said sections
comprising:

optionally, company calendar;
optionally, employee classifieds;
optionally, suggestion box;
15 optionally, bookmarks; and
from HR;

wherein said optional sections are determined by said Administrator.

12. An Employee Portal as in Claim 7, wherein said Shopping Mall
20 comprises a Discounts functional area, said Discounts functional area comprising a
page displaying categories of services and merchandise, wherein said categories
are set from within said Admin section by said Administrator, and wherein each of
said categories is a clickable hyperlink, wherein clicking said hyperlink navigates an
employee user to a page displaying sub-categories and vendors for said
25 category.

13. An Employee Portal as in Claim 12, wherein purchases of goods and
services from said vendors are transacted directly with said vendors.

30 14. An Employee Portal as in Claim 12, wherein said discounts functional area
further comprises a storefront, wherein purchases of goods and services are
transacted through said service provider.

15. An Employee Portal as in Claim 12, wherein said discounts functional area
35 further comprises a featured discounts section, said featured discounts section
viewable across multiple functional areas and sections, and wherein said featured
discounts section provides listings of commercial discounts and promotions, and
wherein said featured discounts section may be targeted to needs and interests
of specific target groups.

16. An Employee Portal as in Claim 7, wherein access to said Admin area is limited to said Administrator and wherein said admin section includes multiple publishing and administrative functions, said functions comprising:

5 bookmarks;
 broadcast messages;
 calendar;
 classifieds;
 discounts;
10 employee access;
 suggestions;
 vendor publication; and
 help.

15 17. An Employee Portal as Claim 16, wherein said bookmarks function allows said Administrator to publish said company bookmarks on said Employee Portal.

18. An Employee Portal as in Claim 16, wherein said broadcast messages function allows said Administrator to publish general messages for specified time
20 periods to any of: all of said employees and to target groups of said employees.

19. An Employee Portal as in Claim 16, wherein said calendar function allows said Administrator to administer said company calendar, wherein said calendar
25 may be targeted at any of: all of said employees and selected target groups of said employees.

20. An Employee Portal as in Claim 16, wherein said classifieds function allows said Administrator to set categories and sub-categories for said employee
30 classifieds and to delete said classified ads.

21. An Employee Portal as in Claim 16, wherein said discounts function allows said Administrator to select categories and sub-categories of vendors to be displayed, and to select vendors from within said categories and sub-categories,
35 wherein said categories, sub-categories and vendors may be targeted at any of: all of said employees and selected target groups of said employees.

22. An Employee Portal as in Claim 16, wherein said employee access function allows said Administrator to administer employee profiles.

23. An Employee Portal as in Claim 16, wherein said suggestions function allows said Administrator to set categories for said employee suggestions, set up an e-mail distribution list for said suggestions, and track, organize and act on said suggestions.

24. An Employee Portal as in Claim 16, wherein said vendor publication function allows said Administrator to customize said assortment of vendors by adding company-specific vendors to said assortment.

25. An Employee Portal as in Claim 7, wherein said my accounts section includes multiple functions, said functions comprising:

- contact information;
- product interests;
- service interests;
- event reminders; and
- change password.

26. An Employee Portal as in Claim 3, further comprising employee profiles for each of said employees, said employee profiles comprising contact and biographical information for each employee, and a password for accessing said Employee Portal.

27. An Employee Portal as in Claim 7, wherein said Help functional area comprises User Help and Admin Help, and wherein access to said Admin Help is limited to said Administrator.

28. An Employee Portal as in Claim 1, further comprising a reports module.

29. A method of using an Employee Portal for aggregating and delivering services and information to employees over an employer company's intranet comprising the steps of:

- providing an extranet portal;
- customizing said extranet portal;
- linking to said customized extranet portal from said employer company's intranet, wherein said customized extranet portal provides:
 - an online shopping mall, wherein said employees may purchase discounted goods and services from an assortment of vendors;
 - multiple communications tools;

multiple community tools; and
an administrative module having controlled access, wherein an Administrator performs publishing and administrative functions.

5 30. The method of Claim 29, wherein said providing step comprises:
leasing said Employee Portal to said employer company by a service provider, wherein said Employee Portal is a customizable software application.

10 31. The method of Claim 30, wherein said Employee Portal is access-controlled, each of said employees having an employee profile, said profile comprising a user account requiring a user ID and a password for access.

32. The method of Claim 30, wherein said customizing step comprises the steps of:

15 branding said Employee Portal with a logo of said company, wherein said Employee Portal is presented as a multi-frame window in a web browser on a computer;

optionally, furnishing an employee information file to said service provider, wherein said service provider uses said employee information file to create said
20 employee profiles;

creating a customized list of goods and services to be offered from said online shopping mall, wherein said goods and services are selected from a list of all available goods and services provided by said service provider;

25 segmenting said employees into specific target groups, wherein said information and services are targetable to the needs and interests of said specific target groups; and

optionally, creating a customized welcome page for said Employee Portal.

30 33. The method of Claim 29, wherein said linking step comprises providing a hyperlink to said extranet portal on said company intranet.

34. The method of Claim 29, wherein said multiple communications tools comprise;

35 bookmarks;
an employee suggestion box;
broadcast messages;
company calendars; and

optionally, additional information resources comprising any of stock quotes, weather, news, and editorial content;

wherein provision of any of said tools is controlled by said Administrator

5 35. The method of Claim 29, wherein said multiple community tools comprise:

bulletin board;

individual calendars;

group calendars; and

10 employee classified ads;

wherein provision of any of said tools is controlled by said Administrator.

36. The method of Claim 35, wherein said Employee Portal comprises multiple functional areas, said areas comprising:

15 Home;

Discounts;

Community;

My Account;

Help; and

20 Admin;

and wherein each of said functional areas comprises a separate home page, viewable in said window.

37. The method of Claim 36, wherein selected tools from said
25 communications tools and said community-building tools are viewable across one or more of said multiple functional areas.

38. The method of Claim 36, further comprising the step of accessing said
30 admin area by an Administrator.

39. The method of Claim 38, further comprising any of the steps of:
publishing bookmarks, wherein said bookmarks link users to sites within
said intranet or on the Internet;

publishing broadcast messages;

35 publishing company calendars;

publishing discounts;

managing employee access;

managing employee classifieds;

managing employee suggestions; and

publishing additional vendors.

40. The method of Claim 36, further comprising the steps of:
accessing said Employee Portal by said employees; and
5 viewing and utilizing said provided information and services.

41. The method of Claim 36, wherein said accessing step comprises the steps of:

visiting said extranet from any of said company intranet and over the
10 Internet;
providing a user ID and password.

42. The method of Claim 41, wherein said viewing and utilizing step comprises any of the steps of:

15 personalizing said Employee Portal by an individual employee;
viewing said broadcast messages.
viewing and optionally responding to said classifieds;
publishing classifieds;
viewing published suggestions;
20 submitting suggestions;
viewing and working with calendars; and
viewing and optionally, purchasing said goods and services.

43. A tool for configuring a portal application, said tool comprising:

25 means for creating a plurality of portal spaces, wherein said portal spaces are logically distinct without being physically separate instances of said application;

means for defining content entities for said portal spaces;

30 means for segmenting a user population of each of said portal spaces into target audiences; and

means for granting said target audiences access to said content entities according to predetermined rules.

44. The tool of Claim 43, said tool comprising a software tool.

45. The tool of Claim 43, wherein said portal comprises an employee portal.

46. The tool of Claim 43, wherein said means for creating portal spaces comprises:

means for defining a customer entity.

47. The tool of Claim 46, wherein said means for defining a customer entity comprises:

5 a customer list screen that displays a list of customers currently defined;
and

a customer definition screen that includes 'add' and 'modify' modes;
wherein said customer list screen includes means for navigating a user to said
customer definition screen.

10

48. The tool of Claim 46, further comprising an employee record definition
screen, said employee record definition screen providing means for defining
fields of an employee record that are particular to a customer.

15 49. The tool of Claim 46, wherein said content entities are defined by any of:
a portal provider;
a portal customer; and
an employee of said customer.

20 50. The tool of Claim 46, wherein said means for defining content entities
comprises:

means for defining vendors;

means for defining a marketplace;

means for defining corporate community items;

25 means for defining discounts and promotions; and

means for defining a customer marketing campaign.

51. The tool of Claim 50, wherein said means for defining vendors comprises:

a vendor list screen that displays a list of vendors currently defined; and

30 a vendor definition screen that includes 'add' and 'modify' modes;

wherein said vendor list screen includes means for navigating a user to said
vendor definition screen.

52. The tool of Claim 50, wherein said means for defining a marketplace
35 comprises:

a marketplace definition screen listing categories, sub-categories and
vendors in tree lists;

means for defining categories;

means for defining sub-categories; and

means for assigning said vendors to said categories and sub-categories.

53. The tool of Claim 52, wherein said means for defining categories comprises:

5 a category definition screen that includes 'add' and 'modify' modes;
wherein said marketplace definition screen includes means for navigating a user to said category definition screen.

54. The tool of Claim 52, wherein said means for defining sub-categories
10 comprises:

a sub-category definition screen that includes 'add' and 'modify' modes;
wherein said marketplace definition screen includes means for navigating a user to said sub-category definition screen.

15 55. The tool of Claim 52, wherein said means for assigning vendors to categories and sub-categories comprises:

a vendor assignment screen that includes 'add' and 'modify' modes;
wherein said marketplace definition screen includes means for navigating a user to said vendor assignment screen.

20 56. The tool of Claim 50, wherein said means for defining corporate community items comprises;

a corporate community screen that lists current corporate community items;
a corporate community definition screen that includes 'add' and 'modify'
25 modes; and

means for managing classified ads;
wherein said corporate community screen includes means for navigating a user to said corporate community definition screen.

30 57. The tool of Claim 56, wherein said means for managing classified ads comprises:

a classifieds section definition screen that displays a list of current classifieds categories and sub-categories defined;

means for defining said classifieds categories; and

35 means for defining said classifieds sub-categories;

wherein said corporate community screen includes means for navigating a user to said classifieds section definition screen.

58. The tool of Claim 57, wherein said means for defining classifieds categories comprises:

a classifieds category definition screen that includes 'add' and 'modify' modes;

5 wherein said classifieds section definition screen includes means for navigating a user to said classifieds category definition screen.

59. The tool of Claim 57, wherein said means for defining classifieds sub-categories comprises:

10 a classifieds sub-category definition screen that includes 'add' and 'modify' modes;

wherein said classifieds section definition screen includes means for navigating a user to said classifieds sub-category definition screen.

15 60. The tool of Claim 50, wherein said means for defining discounts and promotions comprises:

a discounts/promotions list screen that lists all discounts and promotions that have been defined and that are active; and

means for defining said discounts and promotions.

20

61. The tool of Claim 60, wherein said means for defining said discounts and promotions comprises:

a discounts/promotion definition screen that includes 'add' and 'modify' modes;

25 wherein said discounts/promotions list screen includes means for navigating a user to said discounts/promotion definition screen.

62. The tool of Claim 60, wherein said means for defining discounts and promotions further comprises:

30 a discount/promotion placement strategy list screen that lists all current discount/promotion placement strategies; and

means for defining said discount/promotion placement strategies.

63. The tool of Claim 62, wherein said means for defining said discount/promotion placement strategies comprises:

35 a discount/promotion placement strategies definition screen that includes 'add' and 'modify' modes;

wherein said discount/promotion placement strategy list screen includes means for navigating a user to said discount/promotion placement strategies definition screen.

5 64. The tool of Claim 50, wherein said means for defining a customer marketing campaign comprises:

a listing of all categories and sub-categories relevant to a customer; and

a listing of available marketing strategies wherein an appropriate marketing strategy is selected from said list of strategies.

10

65. The tool of Claim 43, wherein said means for segmenting a user population into target groups comprises:

a target group list screen wherein global target groups and employer-specific target groups are displayed in separate tree lists; and

15

means for defining target groups.

66. The tool of Claim 65, wherein said means for defining target groups comprises:

a target group definition screen including 'add' and 'modify' modes;

20

wherein said target group list screen includes means for navigating a user to said target group definition screen.

67. The tool of Claim 66, wherein said target groups are defined using Boolean statements.

25

68. The tool of Claim 43, wherein said means for means for granting said target audiences access to said content entities comprises:

an entity assignment screen, wherein a customer is selected from a list of customers and appropriate categories, sub-categories, vendors global target groups and employer specific target groups are assigned to said customer.

30

69. The tool of Claim 68, wherein said means for granting said target audiences access to said content entities further comprises:

a screen for assigning resources to a customer wherein an entity is selected and assigned to all relevant customers.

35

70. The tool of Claim 69, wherein a customer formulates said predetermined rules according to needs and desires of said target groups.

71. The tool of Claim 68, wherein said means for granting said target audiences access to said content entities further comprises:
means for enabling and disabling said content entities by said employer.

5 72. A portal application, wherein separate portal spaces that are logically distinct without being physically separate instances of said portal application are created, said portal application including a configuration tool, said configuration tool being operative to:

define content entities for said portal spaces;

10 segment a user population for each portal space into target audiences;
and

grant said target audiences access to said content entities according to predetermined rules.

15

1/29

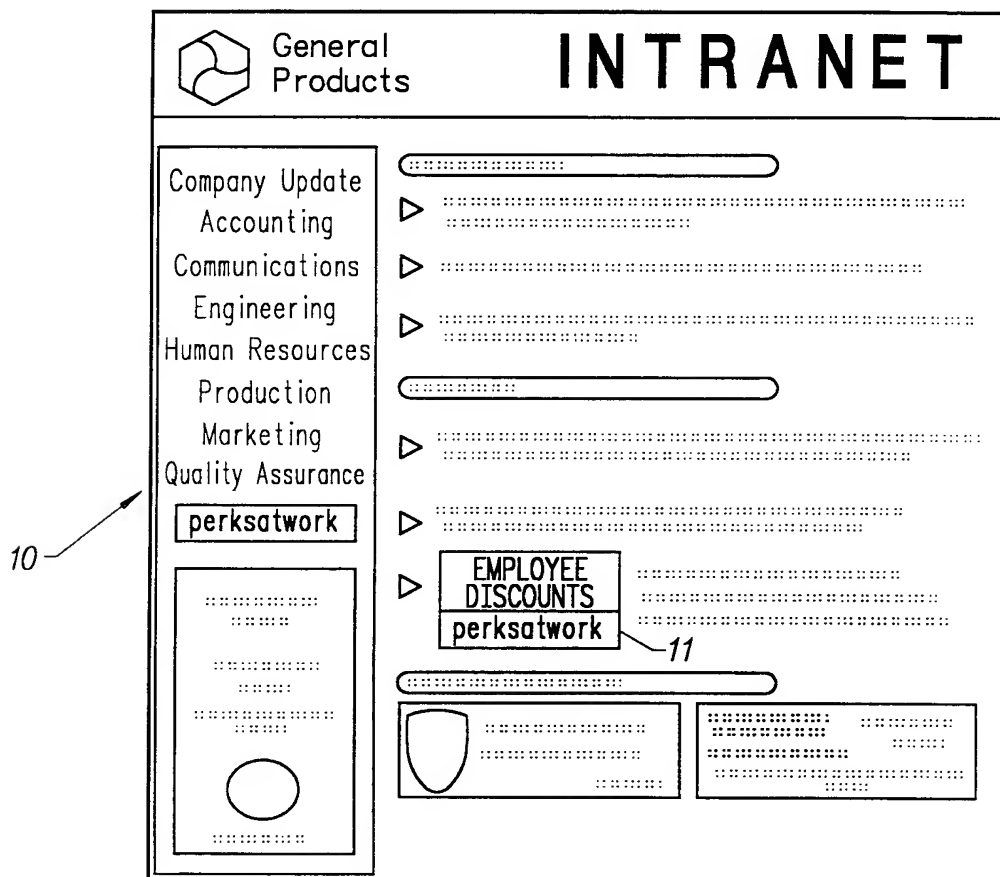


FIG. 1

2/29

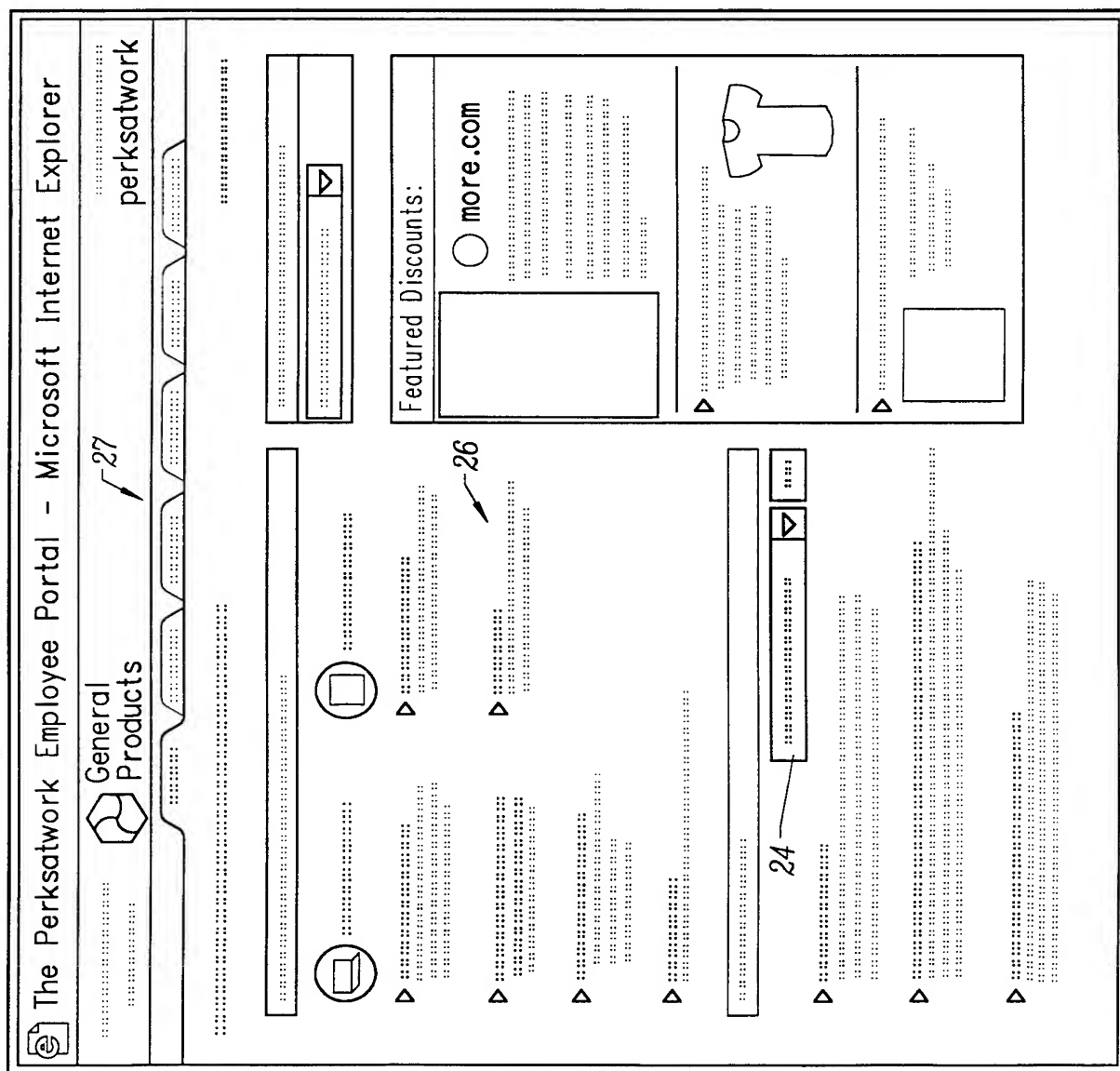


FIG. 2

3/29

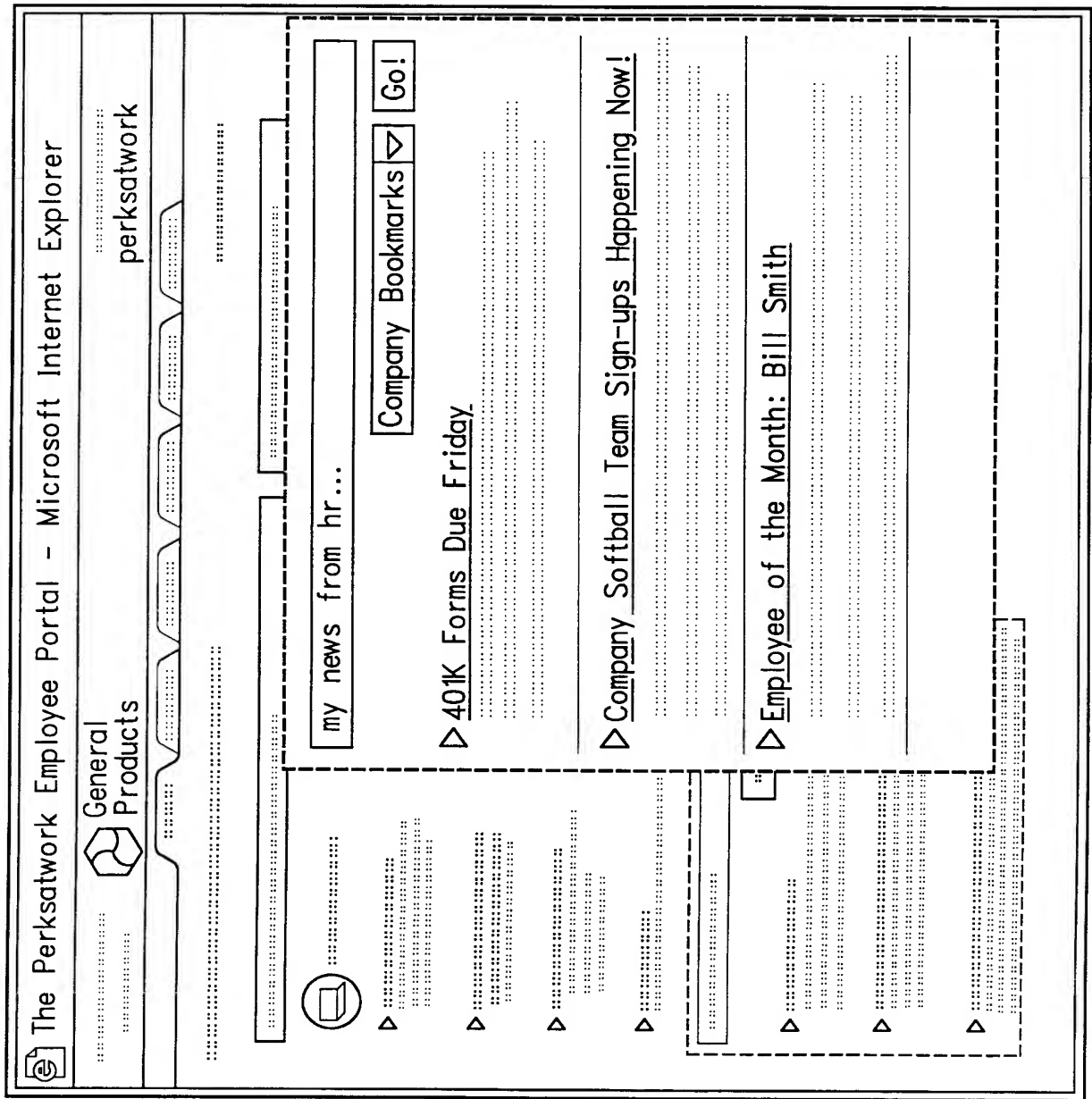


FIG. 3

4/29

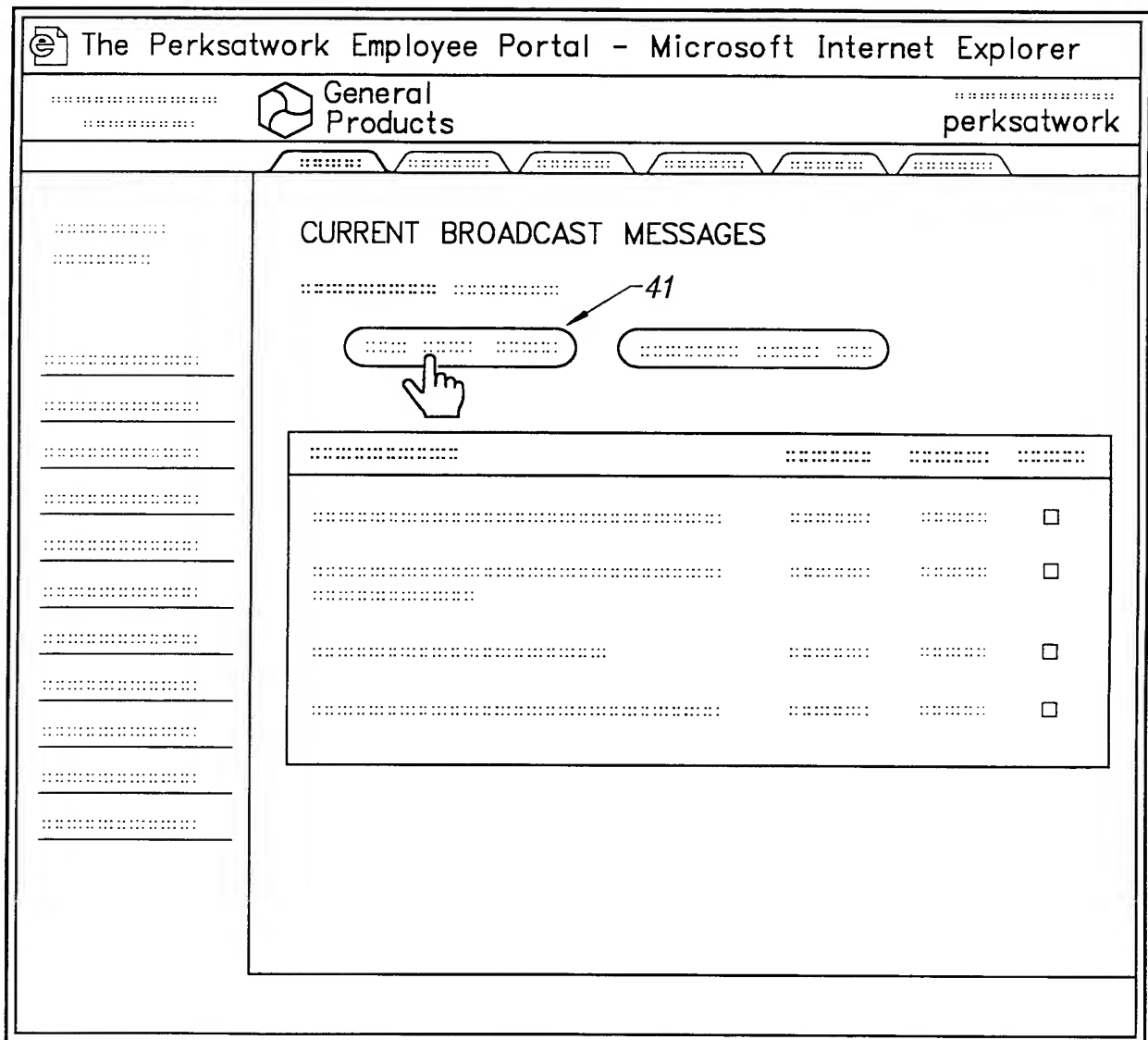


FIG. 4

5/29

The Perksatwork Employee Portal - Microsoft Internet Explorer

General Products

perksatwork

ADD NEW BROADCAST MESSAGE

Company Party

West Coast Company Party will be held this Friday at 2 P.M. at the San Francisco office

FIG. 5

6/29

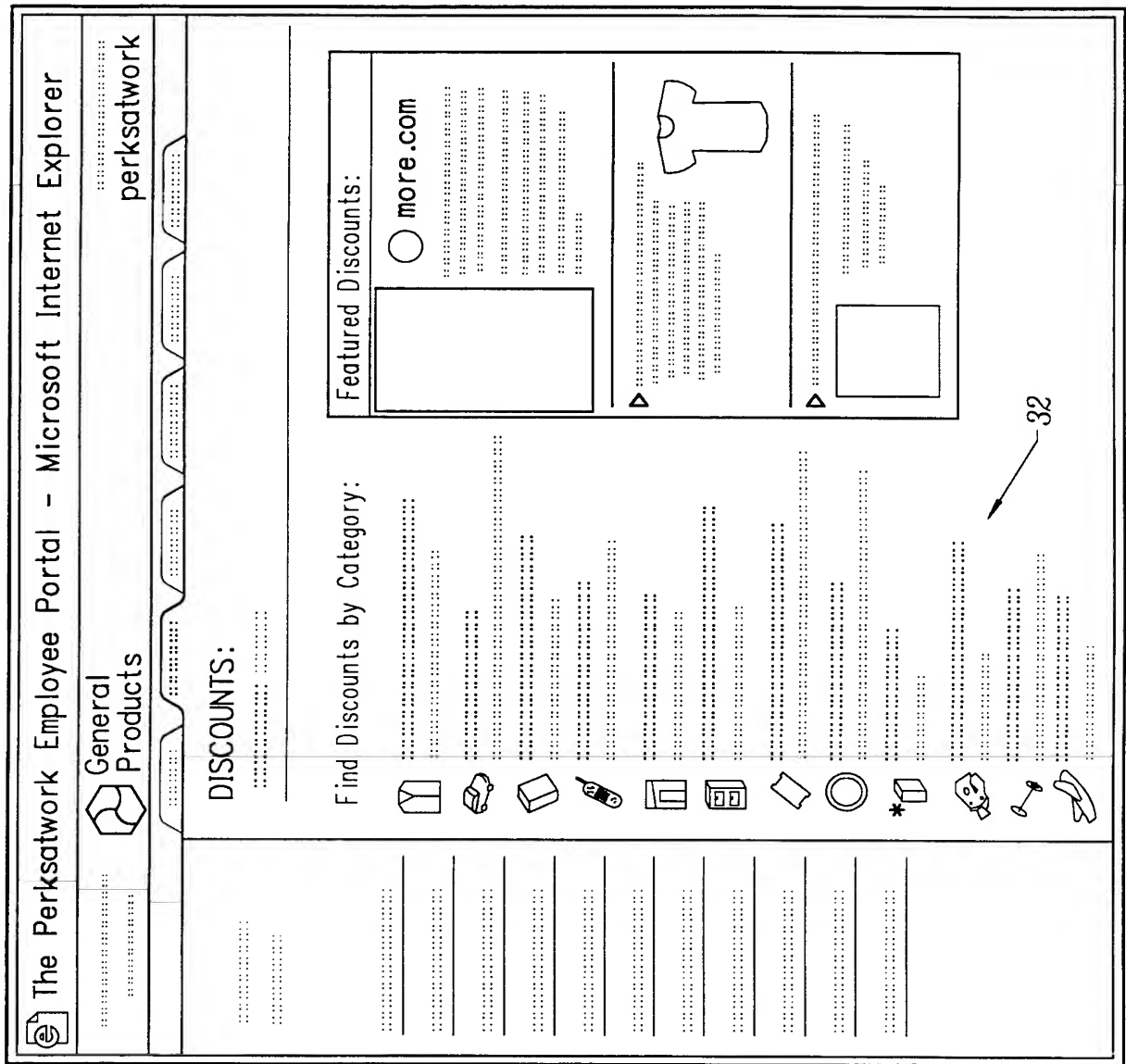


FIG. 6

7/29

FIG. 7

The Perksatwork Employee Portal - Microsoft Internet Explorer	
General Products	
perksatwork	
ENTERTAINMENT AND TICKETS	
Choose a Sub-Category or Vendor:	
Featured Discounts:	
\$4.00 AMC	
71	
72	

8/29

33

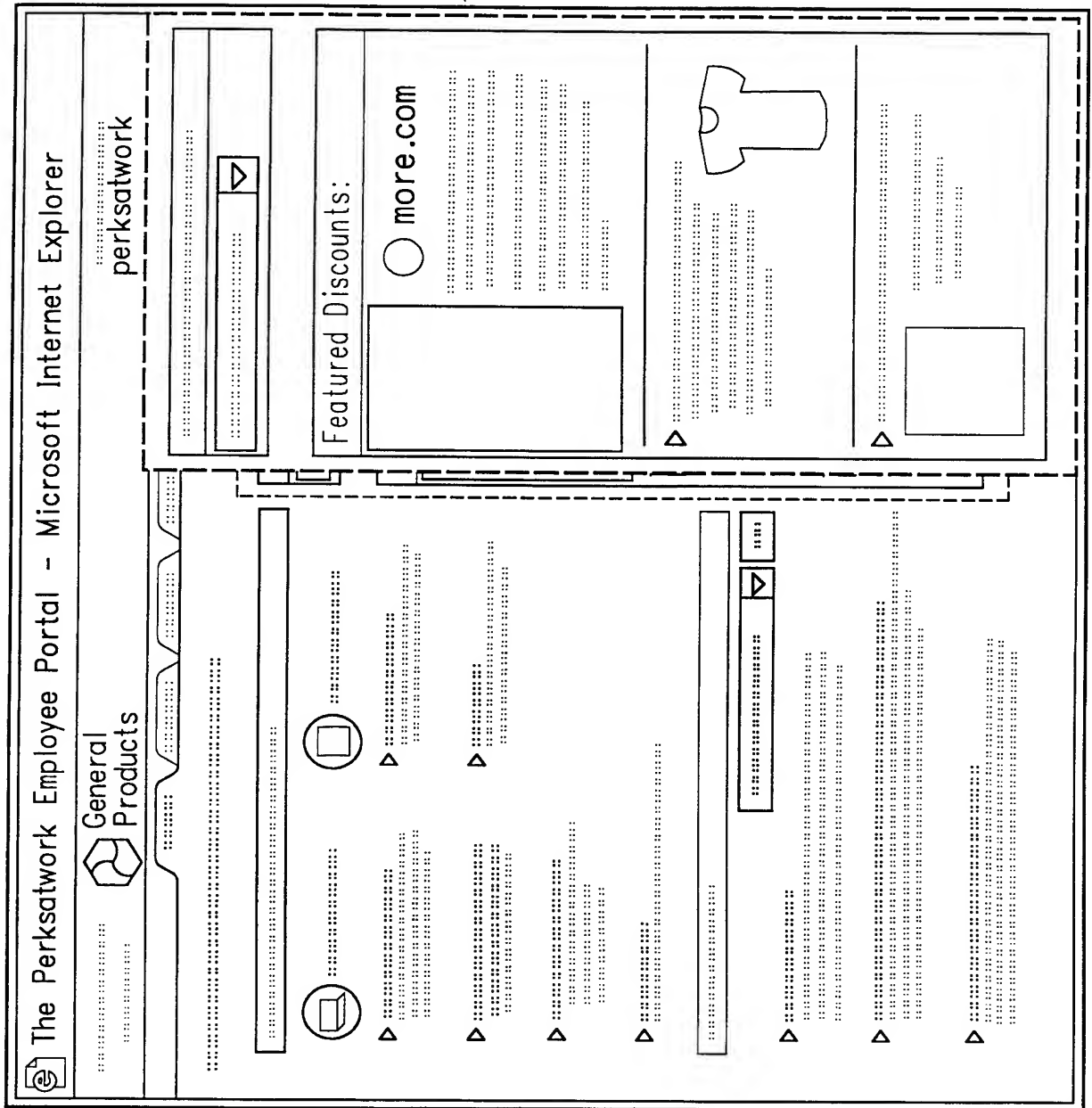


FIG. 8

9/29

16

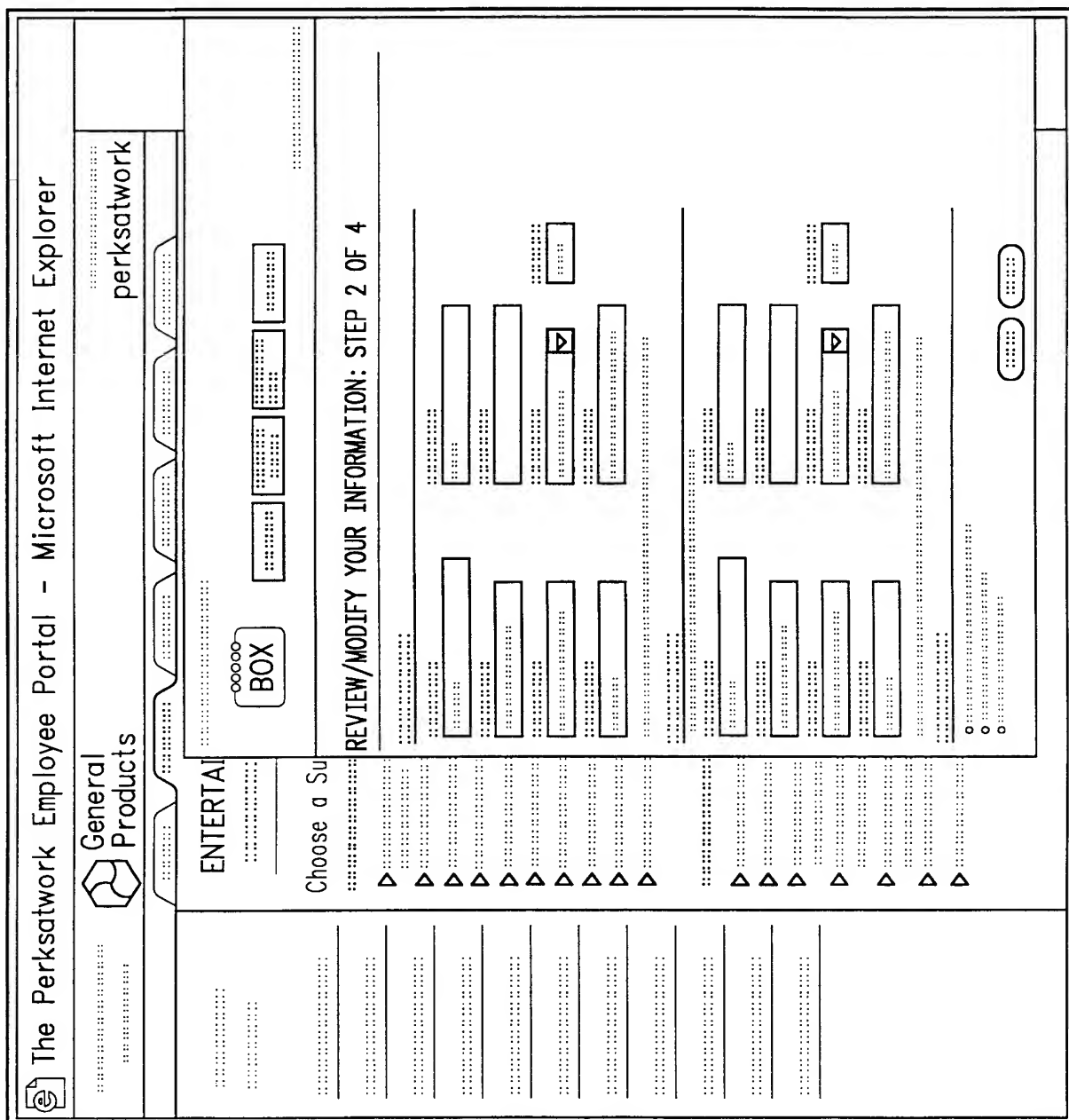


FIG. 9

10/29

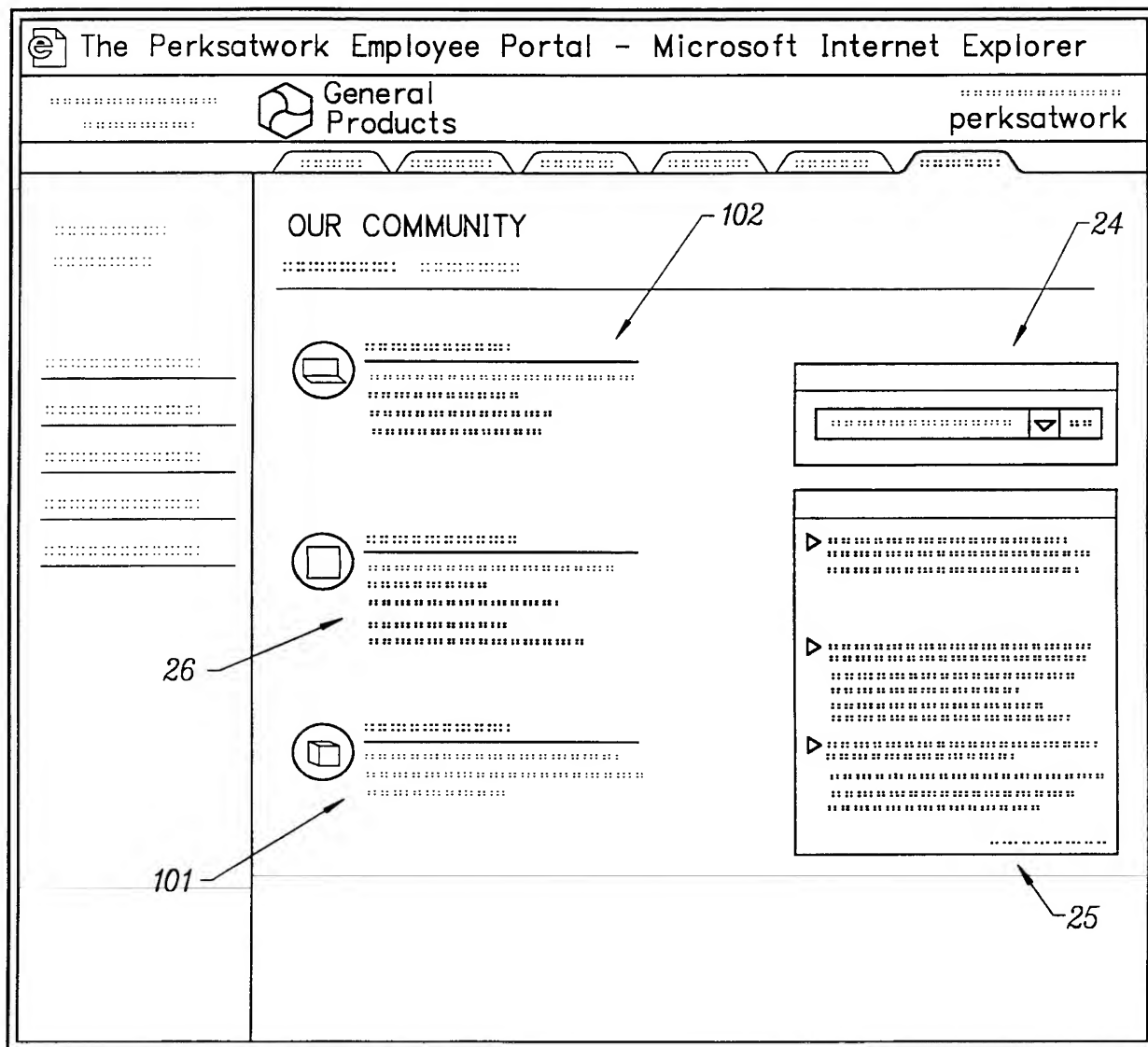


FIG. 10

11/29

The Perksatwork Employee Portal - Microsoft Internet Explorer

General Products perksatwork

COMPANY MAIN CALENDAR

111

Calendar: Company Main Calendar

October 1999

					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

FIG. 11

12/29

212

FIG. 12

The Perksatwork Employee Portal - Microsoft Internet Explorer

General Products perksatwork

COMPANY MAIN CALENDAR

Calendar: Company Main Calendar

October 1999

1 2

Add Comment For: REFFERALS FOR BABY SITTER

Comment:

Notes:

Post Item

13/29

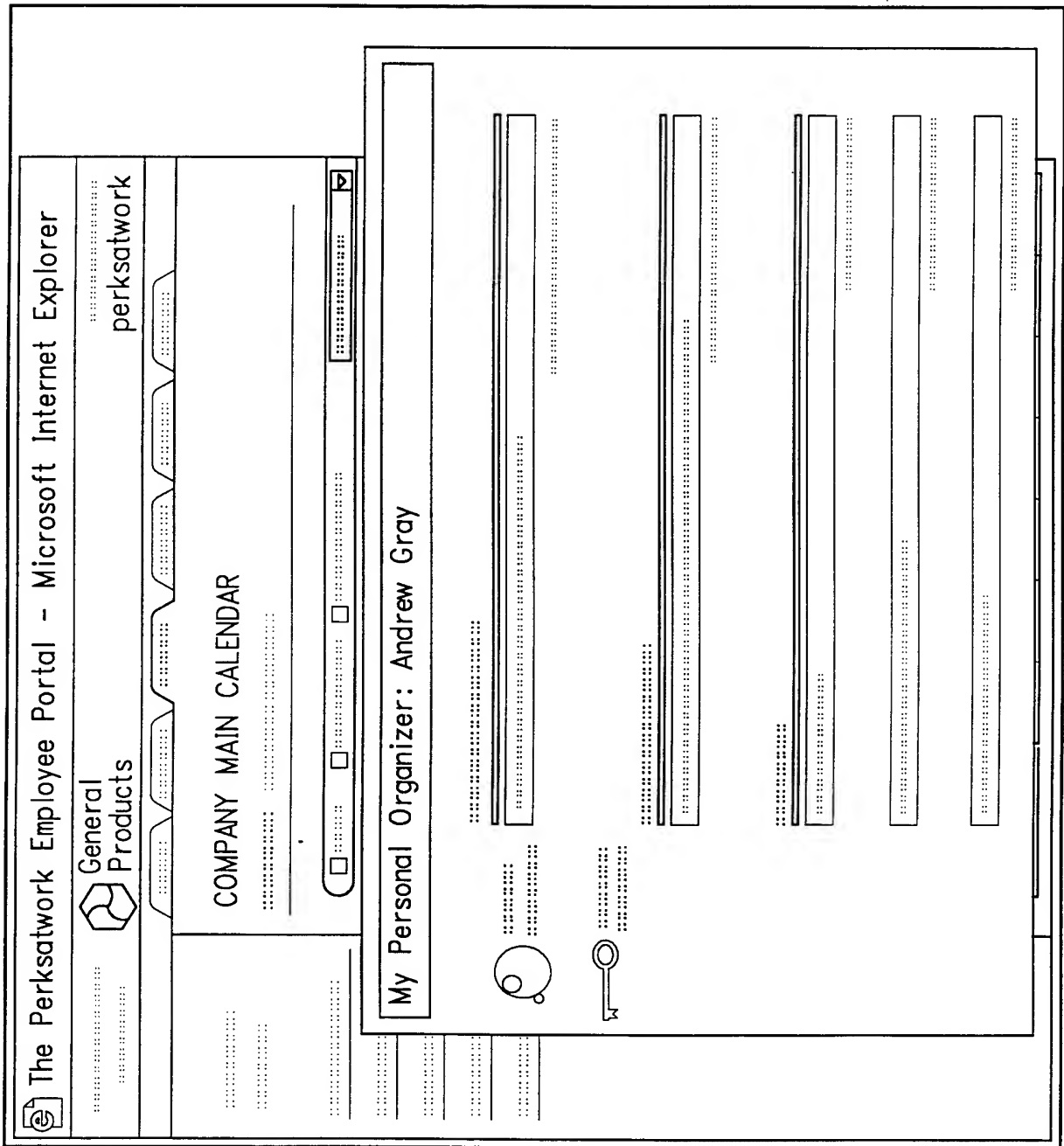


FIG. 13

14/29

The Perksatwork Employee Portal - Microsoft Internet Explorer

General Products perksatwork

COMPANY MAIN CALENDAR

142

141

Calendar: Company Main Calendar

October 1999

3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

FIG. 14

15/29

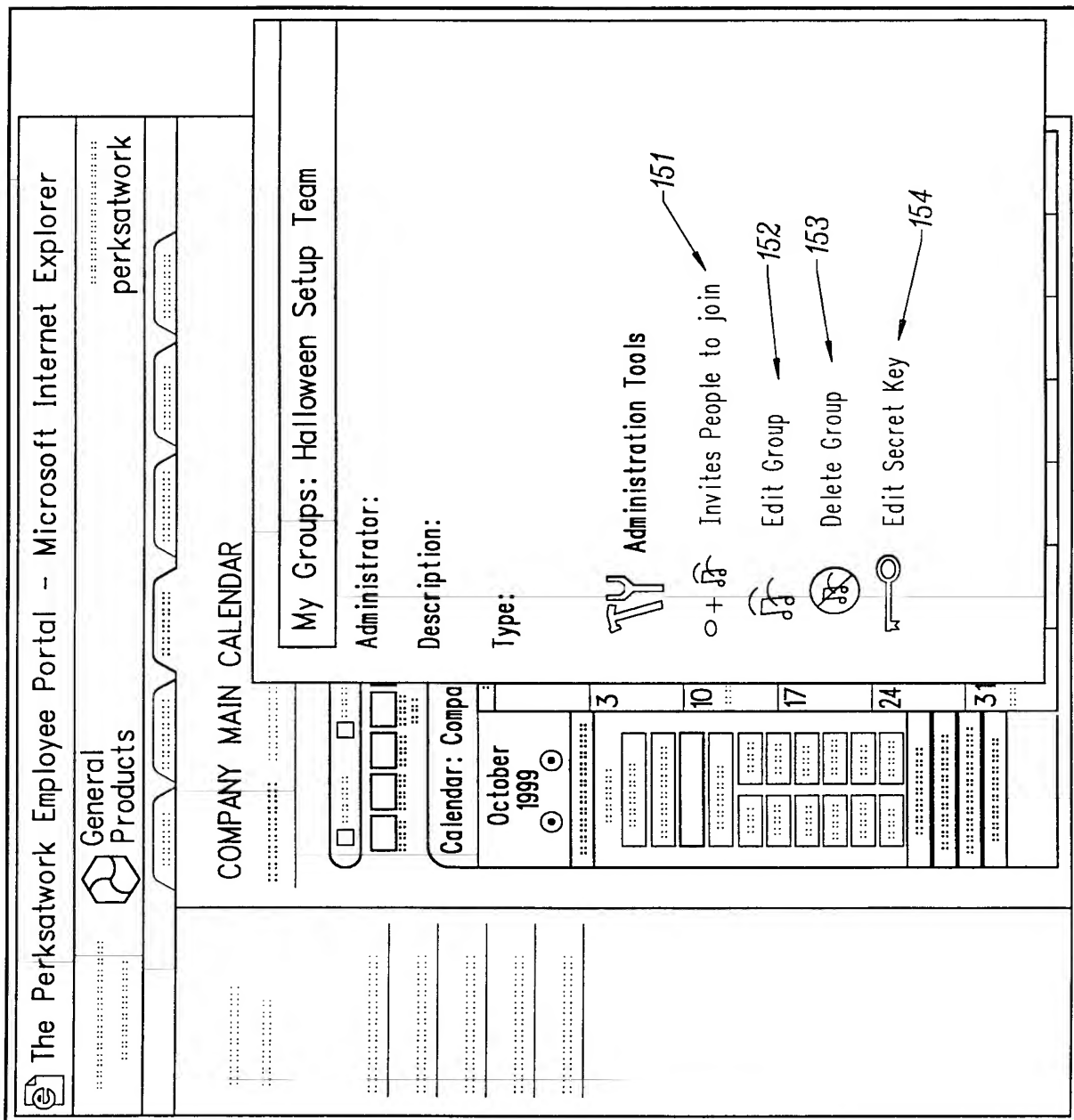


FIG. 15

16/29

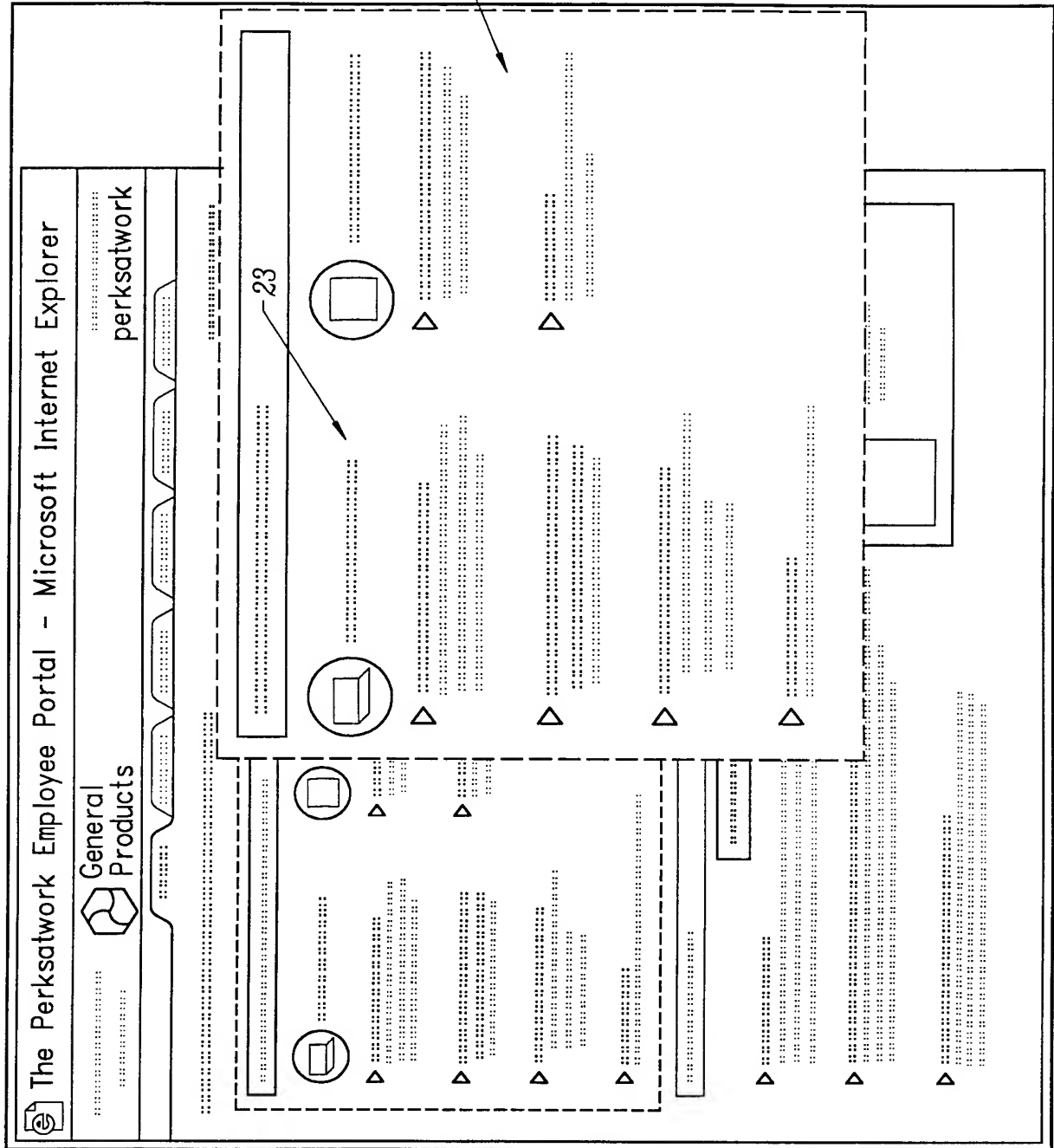


FIG. 16

17/29

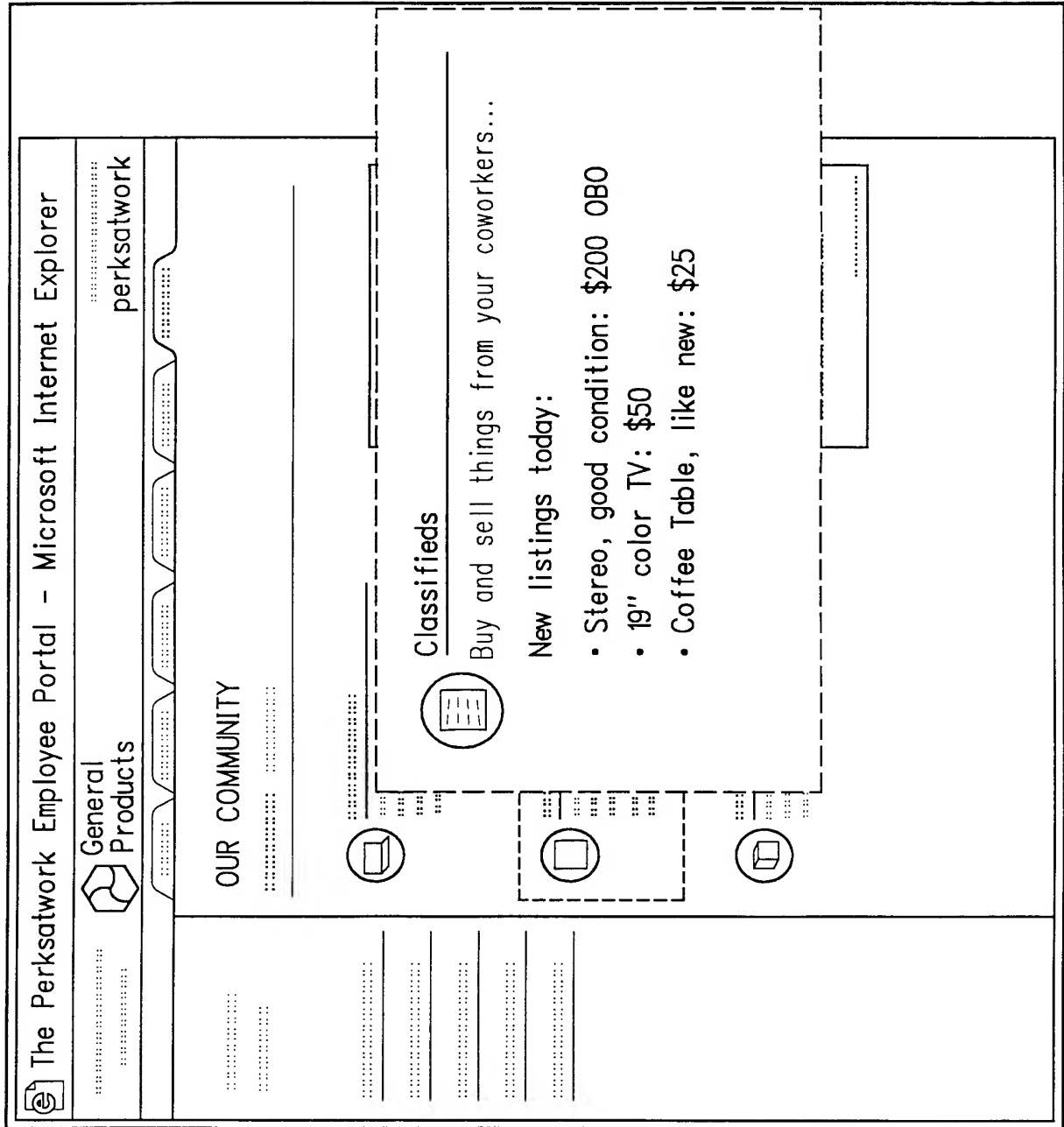


FIG. 17

18/29

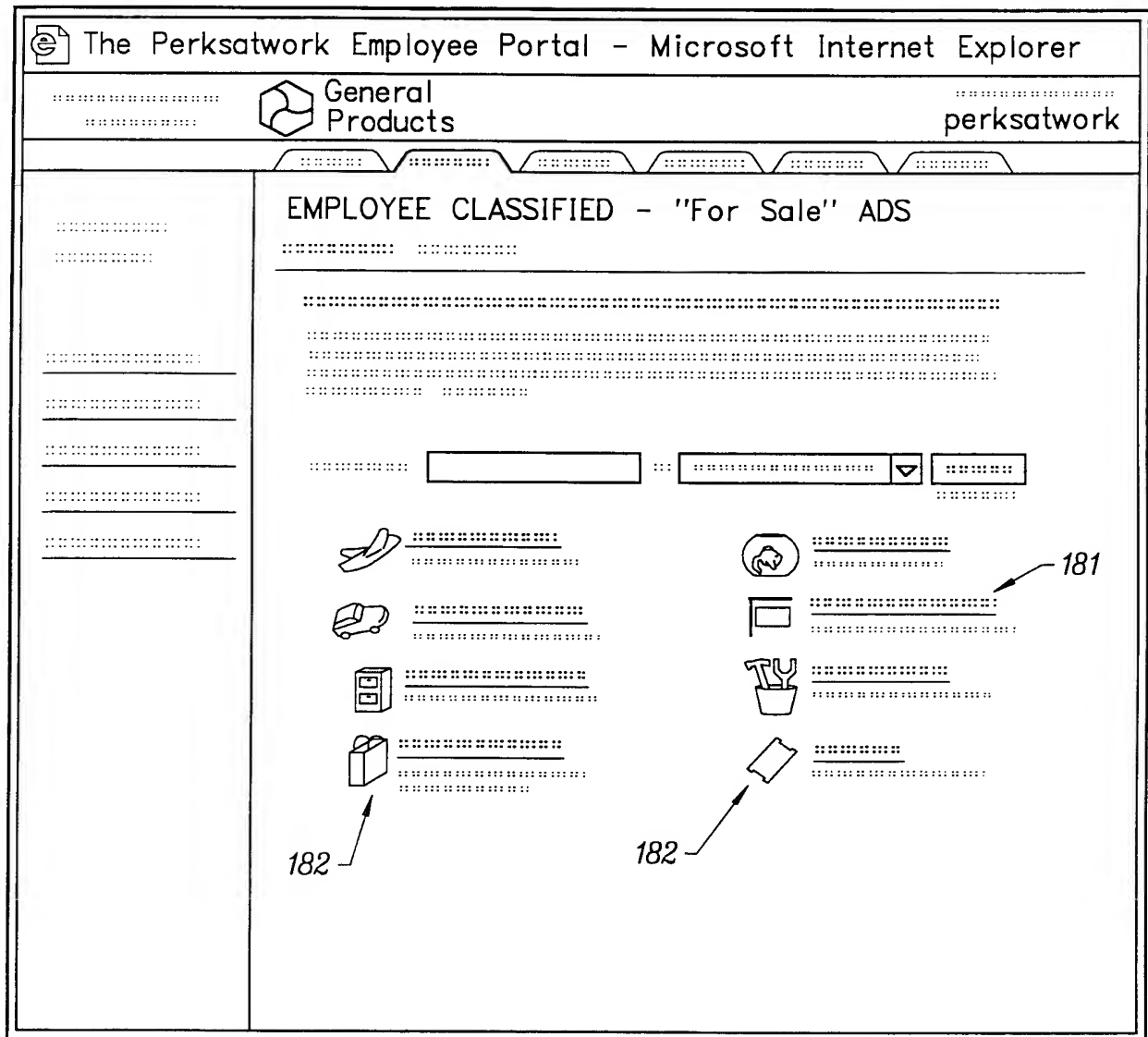
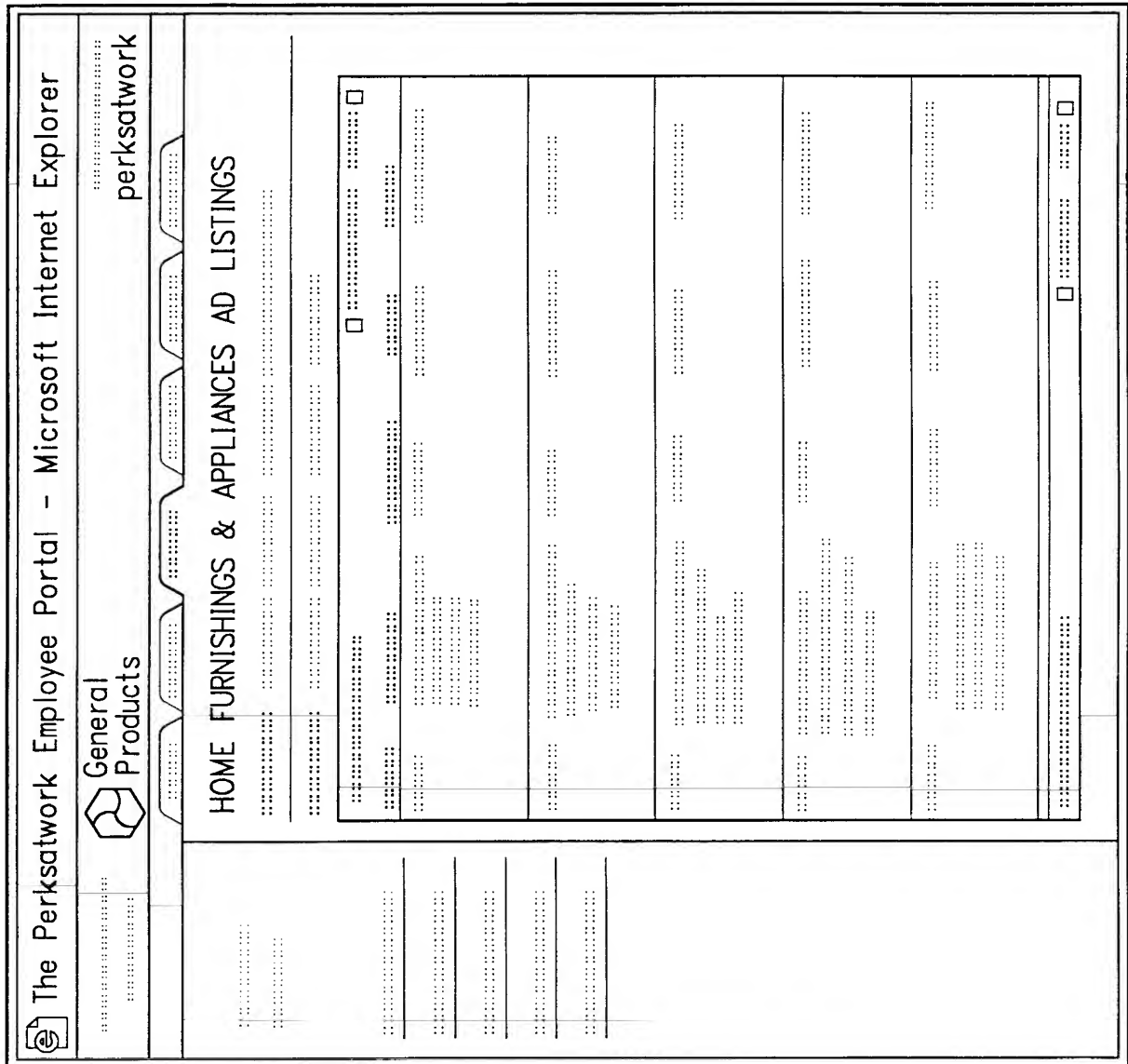


FIG. 18



20/29

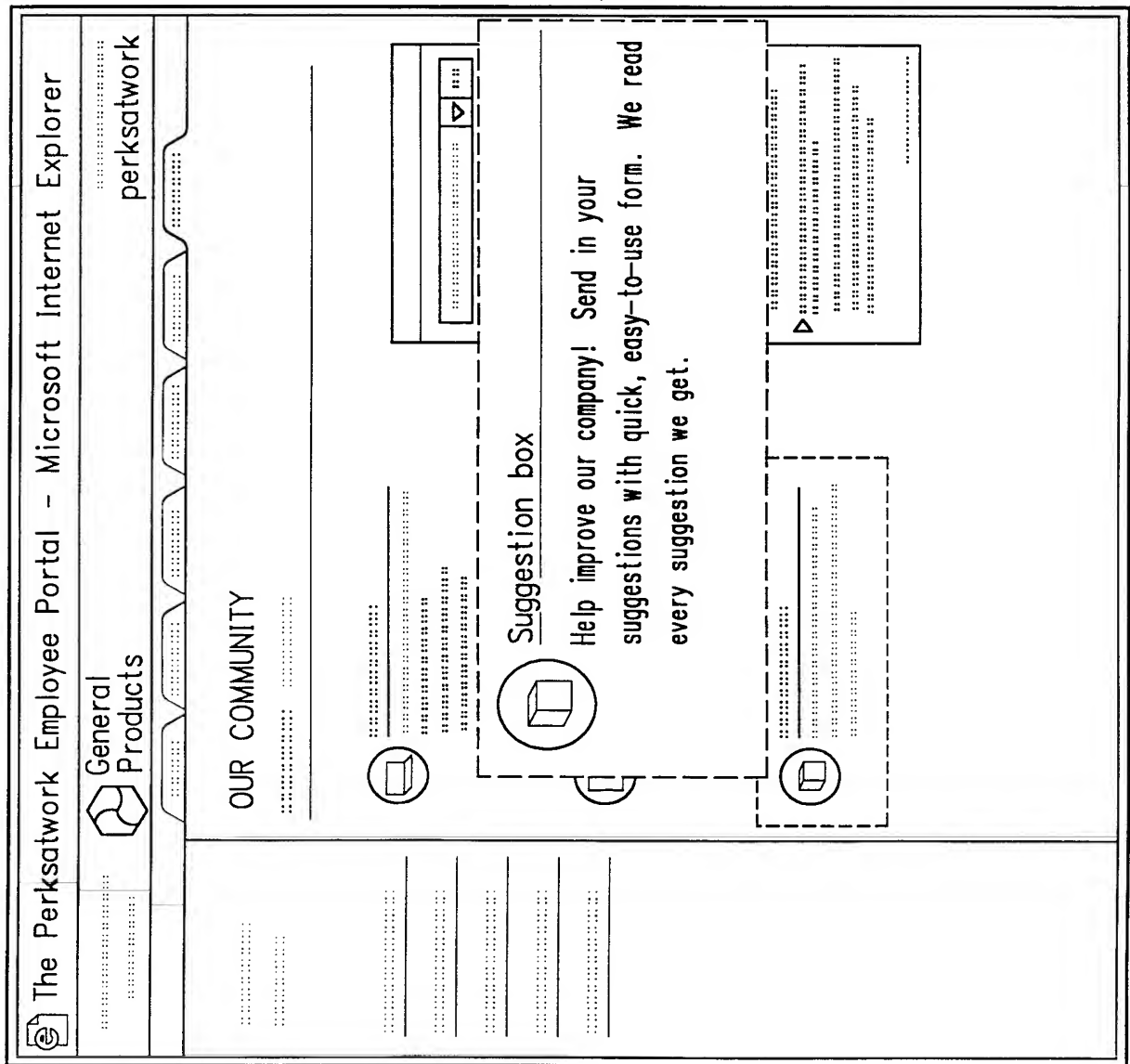
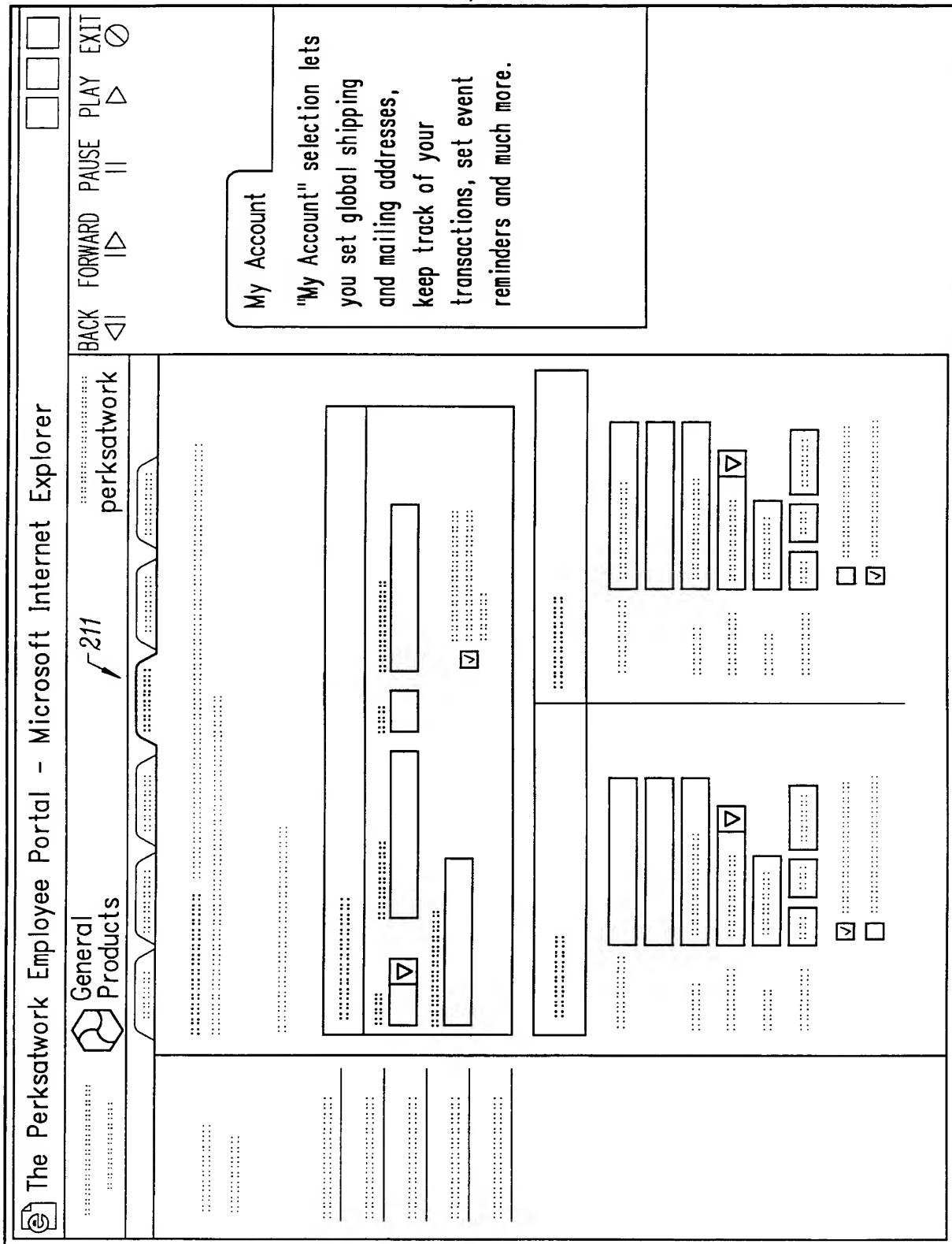


FIG. 20



22/29

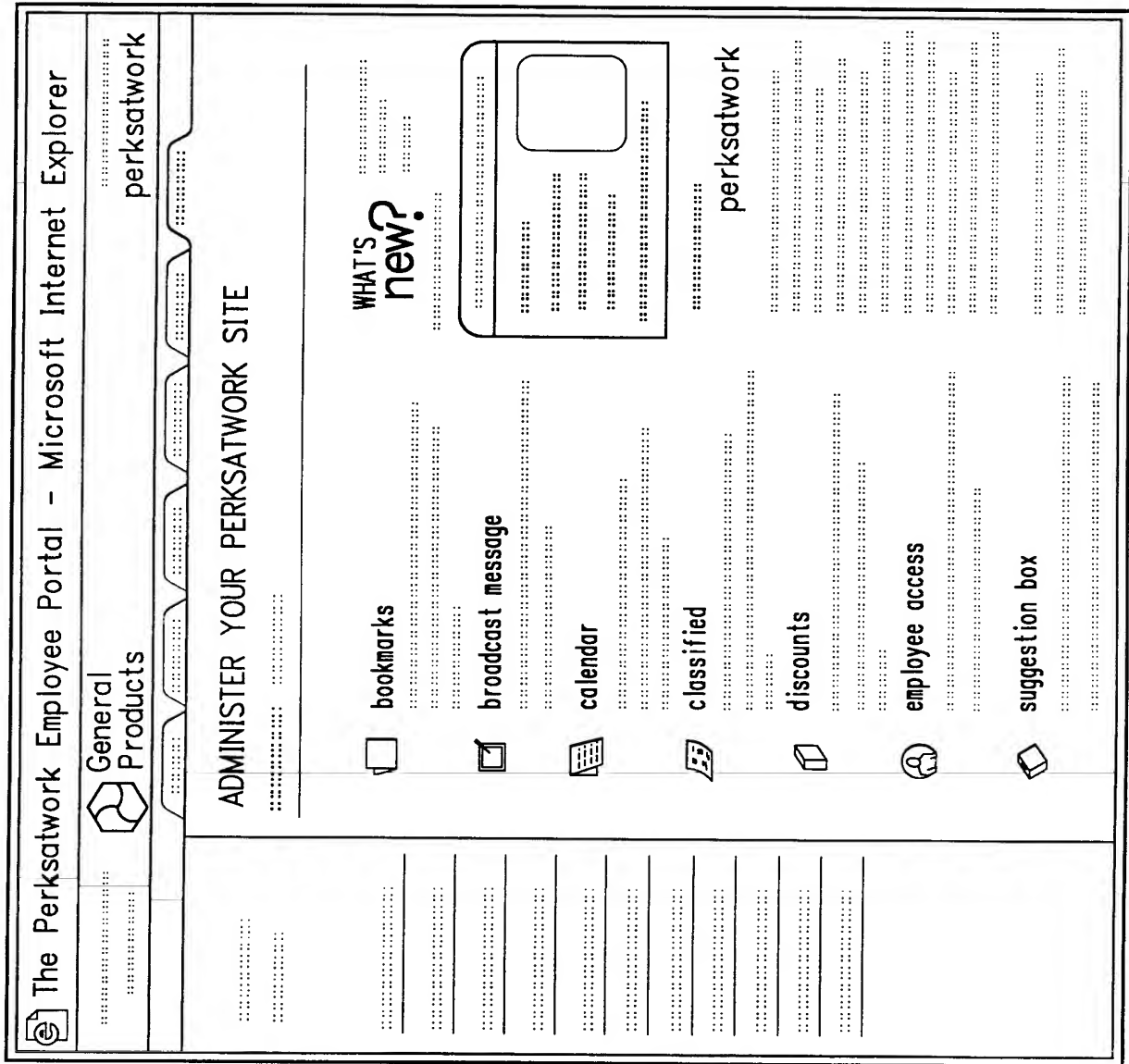


FIG. 22

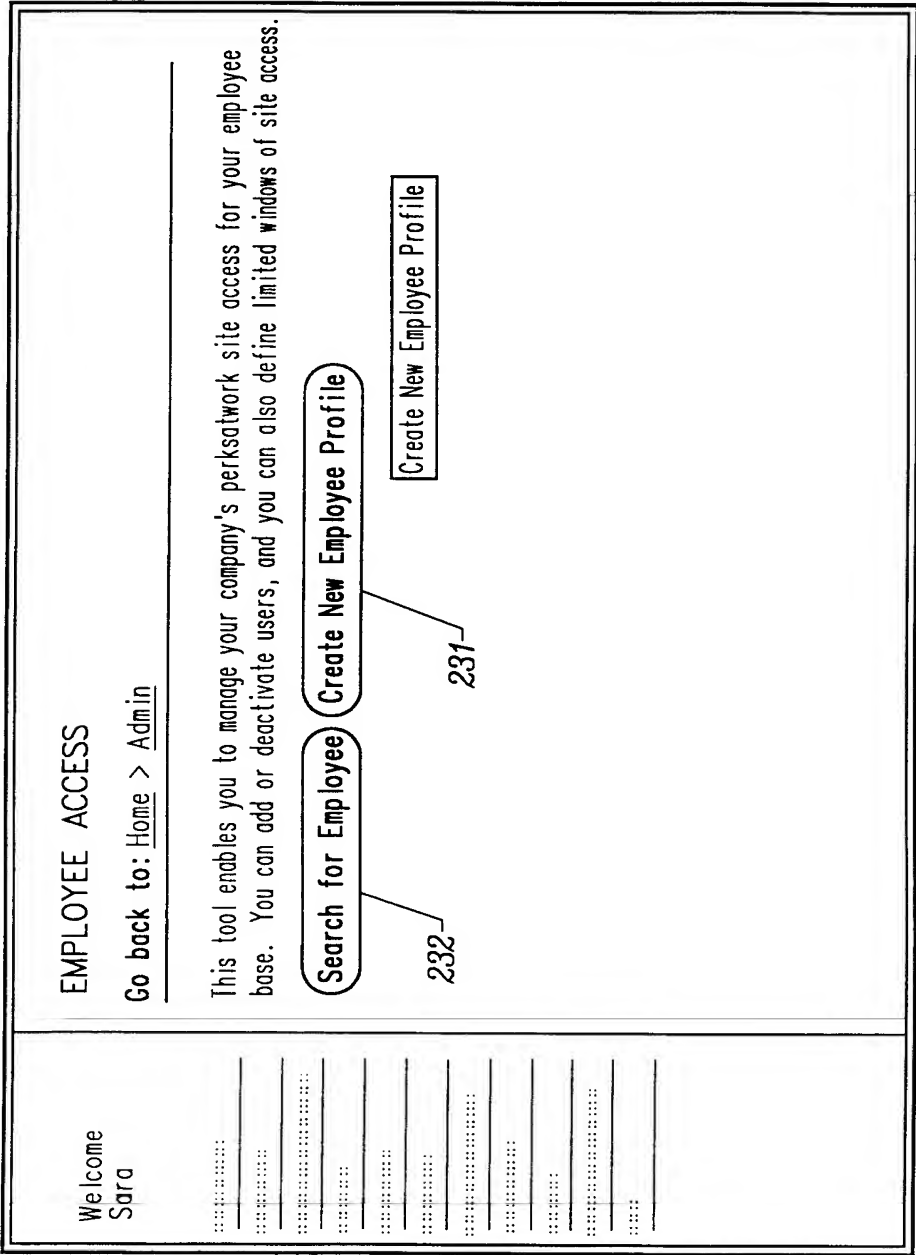


FIG. 23

Welcome
Sara

SEARCH FOR EMPLOYEE

Go back to: [Home](#) > [Admin](#) > [Employee Access](#)

This function will enable you to search for an existing employee. Just enter the first and last name of the employee you're looking for, then press the Search button below.

STEP 1: Enter First Name

241

STEP 2: Enter Last Name

242

STEP 3: Press

Search

243

FIG. 24

Welcome
Sara

SEARCH RESULTS

Go back to: [Home](#) > [Admin](#) > [Employee Access](#) > [Search For Employee](#)

Here are the results from your search. Once you've identified the employee you are looking for, select that employee's name hyperlink. This will navigate you to their Employee Profile where you can proceed with your request.

Employee Name	E-mail Address
Rosario-Gonzalez, Lucia Maria, Anromedonica	rosario_luciamaria@companyname.com
Last, First, MI,	email@companyname.com
Last, First, MI,	email@companyname.com

251

FIG. 25

26/29

Welcome
Sara

EMPLOYEE PROFILE

Go back to: [Home](#) > [Admin](#) > [Employee Access](#) > [Search For Employee](#) > [Search Results](#)

Contract Information:

First Name: John

Middle Initial: A.

Last Name: Doe

E-mail Address: john_doe@blahblah.com

Admin Access: johndoe1

Work Phone: (415) 222-2222

Work Address: 744 Alabama Street
Level 2

City: San Francisco

State: California

Zip: 94110

Custom Fields:

Department: Business Development

Corporate Title: Senior Vice President

Functional Title: Manager

Level: S5

Other: Aries

perksatwork Access Dates:

Begin Date: 09/12/99

End Date: Not defined

FIG. 26

27/29

The Perksatwork Employee Portal - Microsoft Internet Explorer

General Products

perksatwork

PUBLISHED VENDORS

Create Vendor Page

Activate Selected Vendors

Vendor List

Vendor 1

Vendor 2

Vendor 3

Vendor 4

Active

☐
☐
☐
☐

FIG. 27

28/29

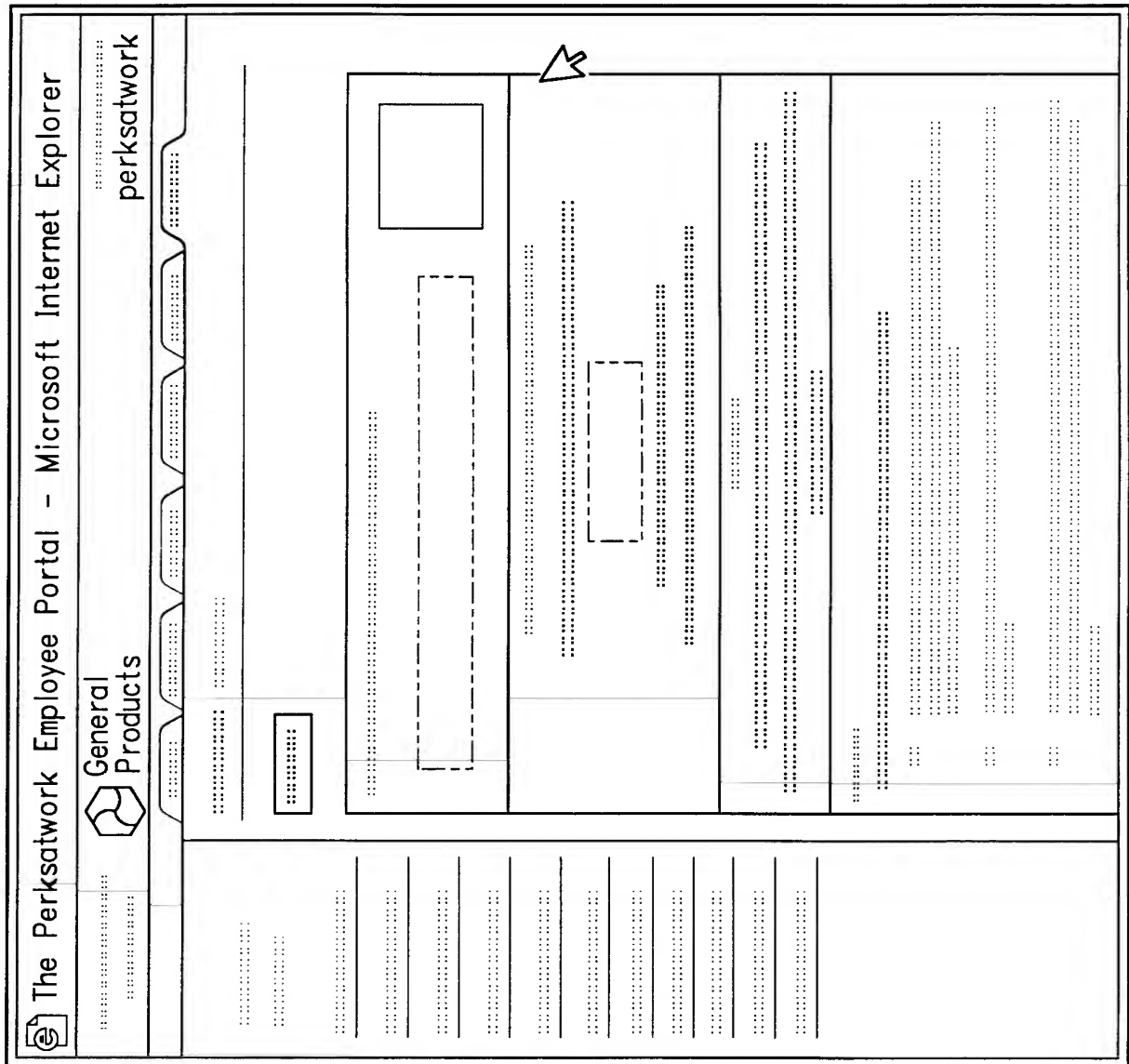


FIG. 28

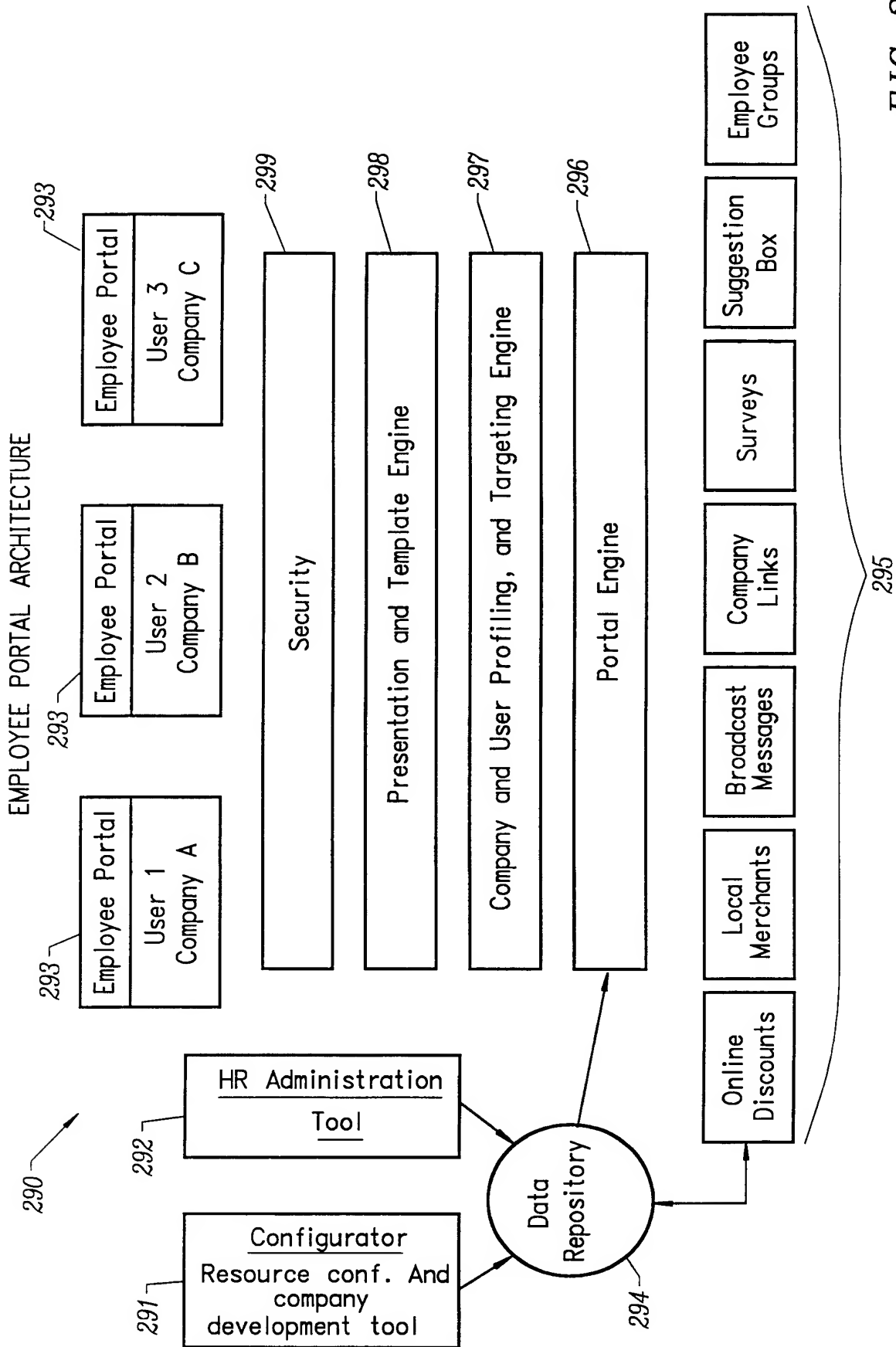


FIG. 29